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unit one buildings volume 2 part two

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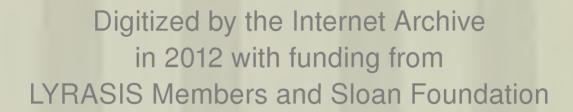
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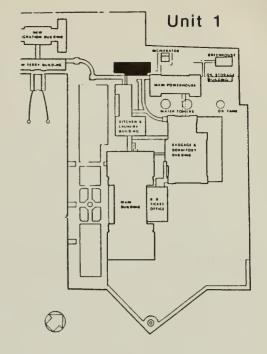
HISTORIC STRUCTURES REPORT UNIT ONE BUILDINGS

Volume 2 Part Two

Prepared by

Beyer Blinder Belle/ Anderson Notter Finegold





D. BAKERY & CARPENTRY BUILDING

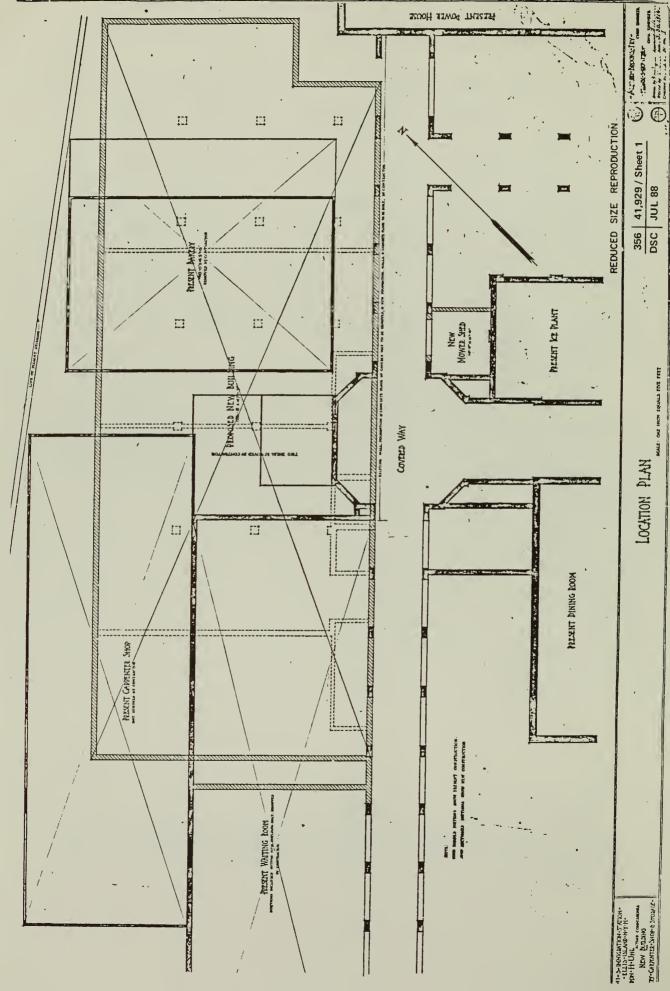


1. Construction History

The bakery and carpentry building was constructed in 1914-1915, following Commissioner Williams' request of \$60,000 for the construction of a fireproof building to replace the temporary wooden carpentry shop and bakery. The two story brick-sheathed steel and concrete structure incorporated portions of the old carpentry shop (exhibit 1). The former bakery, two sheds, and the previous frame waiting room for friends of the immigrants were razed. Second floor corridors were constructed connecting the new bakery and carpentry building with the kitchen and laundry building and the powerhouse (see "Kitchen and Laundry Building" chapter).

The stair along the east wall of the bakery and carpentry, connecting corridor 5 and the second floor, was built in 1934 for the use of immigrants going through the building on their way from the new immigrant building to the kitchen and laundry building for their meals. 1

¹U.S. Department of the Interior, National Park Service, Denver Service Center, "Historic Structure Report; Ellis Island; Historical Data," by Harlan D. Unrau, 1981, pp. 592-594.



Building plan for new Bakery and Carpentry building- 1914.

NPS Drawing No. 41.929:1

2. Exterior

a. Drawings

In August 1984 the architectural/engineering team measured the bakery and carpentry building. Drawings at 1/8" scale were prepared that depict "as found" conditions. See exhibits 2 through 4.

b. <u>History</u>

Exhibits 5 through 7 depict the original elevations and roof plan of the bakery and carpentry building. The one-story bake shop at the southern end of the building was part of the original design. No documentation exists regarding exterior work on the building between 1915 and 1954.

c. Description

The two-story bakery and carpentry building is a steel-frame structure with exterior brick bearing walls laid in Flemish bond. The building has a granite base, a copper cornice, and limestone trim, including lintels at the first story, sills at the second story, and coping. The flat roof has a tar and gravel surface. The east and west elevations are six bays wide and the north and south elevations have three bays. Each two-story bay has an enframement of two rows of headers and an inset brick panel between stories. The panels are Flemish bond with dark headers. Windows are of the metal sash industrial type with eight-light pivotal sash (photos 1-6).

A short one-story shed-roofed brick oven room is located at the southern side of the building. It has a

concrete base and cornice and eight-light metal sash pivotal windows.

The bakery and carpentry building has no exterior entrances; entry is via the other buildings: One corridor at second floor level runs from the east wall of the bakery and carpentry along the north wall of the kitchen and laundry (hall 201) (see the kitchen and laundry section for a discussion of this structure); a light-steel frame passageway (hall 202), sheathed in stucco, connects the northeast corner of the bakery and carpentry (room 203) with the second story of the powerhouse; and several of the first floor rooms are entered from covered way 5 (C-5).

d. Existing Conditions

In general this building exhibits the same types of deterioration as the other buildings. The generally in fair condition although repointing necessary. Serious mortar loss is noticeable in locations where downspouts are missing, particularly on the west elevation (photo 7). The brick and mortar are in better condition on the more protected east elevation. Foundation cracking has occurred at the juncture of the one-story oven room on the west elevation (photo 8). Pronounced cracking and spalling are present at the lintel level on the west and north elevations (photos 9 and 10). Vines at the northwest and southwest corners and on the one-story oven room are causing surface spalling. A rusted pipe, bolted to the first floor limestone sill at the north end of the west elevation and on the north elevation has caused extensive spalling and loss of material (photo 11). Spalling is also present at window sill joints (photo 12). The concrete cornice of the oven room has spalled. The stucco exterior of the corridor to the powerhouse is severely cracked.

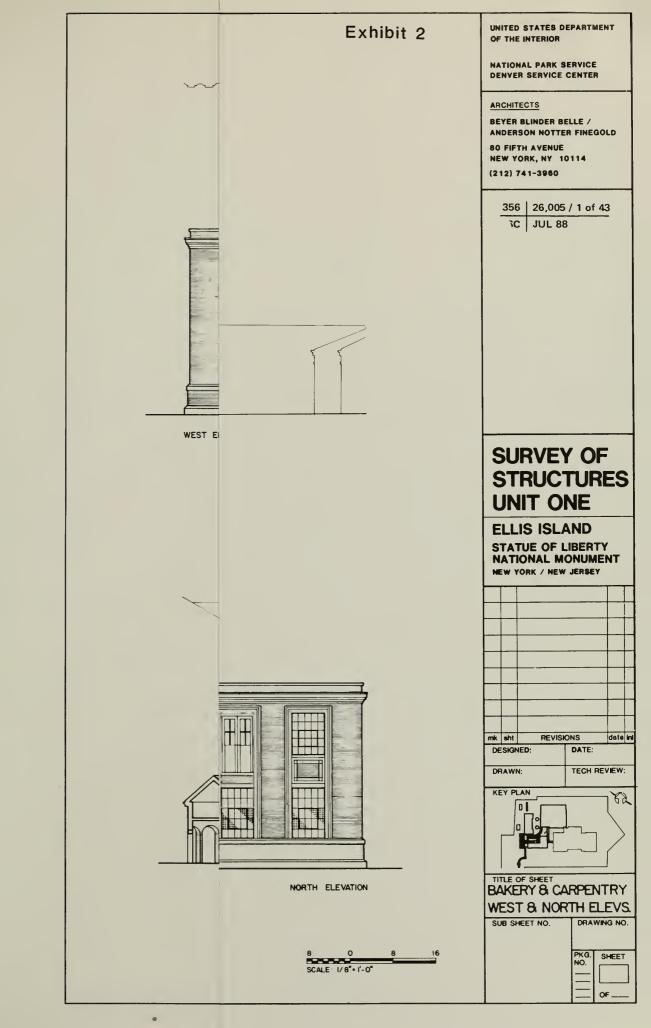
Metal window sash, wire mesh window guards, exposed spandrel beams, and the metal double doors on the north elevation are all corroded. Iron staining has occurred in association with these elements, particularly at sills on all elevations and lintels on the north elevation. Staining is also noticed at the sills below the pipe at the west and north elevations.

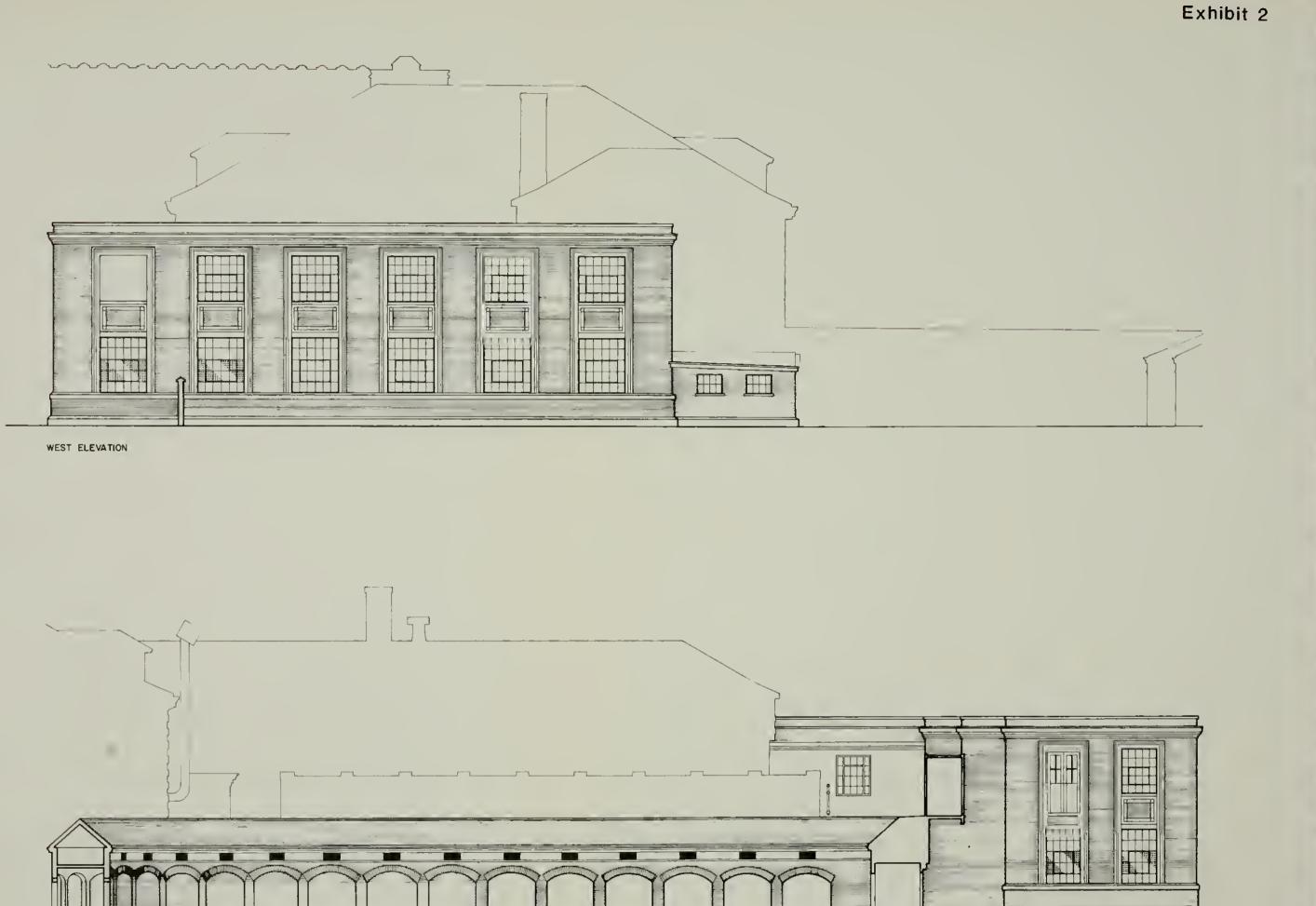
Some efflorescence is present, notably at the corbel table on the south elevation and under the cornice on the east elevation (photo 5). Biological staining is located at the base on the west and north elevations.

Metal sash windows, as mentioned above, are corroded. More than half have broken or missing glazing, particularly those at the west and south elevations. The latter have been covered with sheets of plastic on the interior for temporary protection (photo 13).

Drains into the gutters are blocked with vegetation and gravel. Most downspouts are missing and ventilator caps are no longer extant, allowing water to enter the building. The one-story oven room appears to lack a drainage system and has no flashing at the roof edge.







CORRIDOR FOUR

NORTH ELEVATION

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KEY PLAN

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BAKERY & CARPENTRY WEST & NORTH ELEVS. DRAWING NO.

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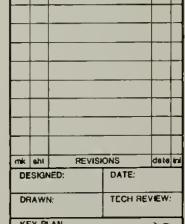
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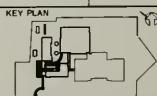
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SURVEY OF STRUCTURES UNIT ONE

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BAKERY & CARPENTRY

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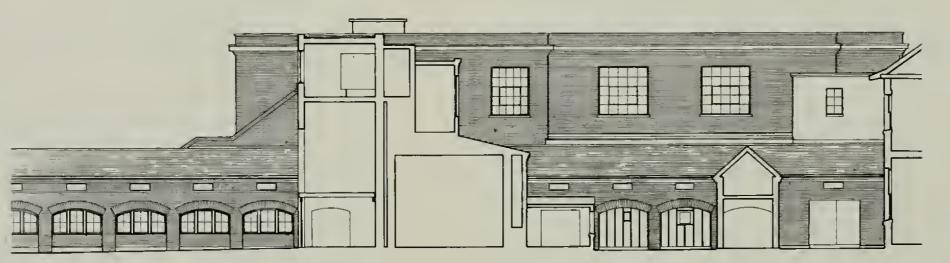
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BAKERY B CARPENTRY

CORRIDOR FIVE

KITCHEN & LAUNDRY

SOUTH ELEVATION



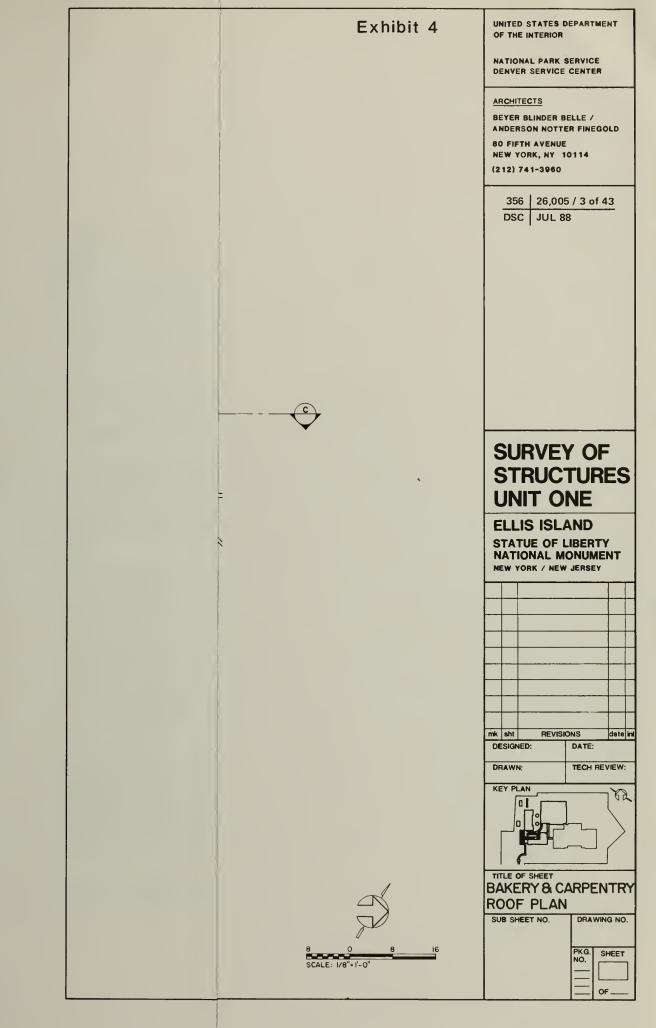
CORRIDOR FIVE

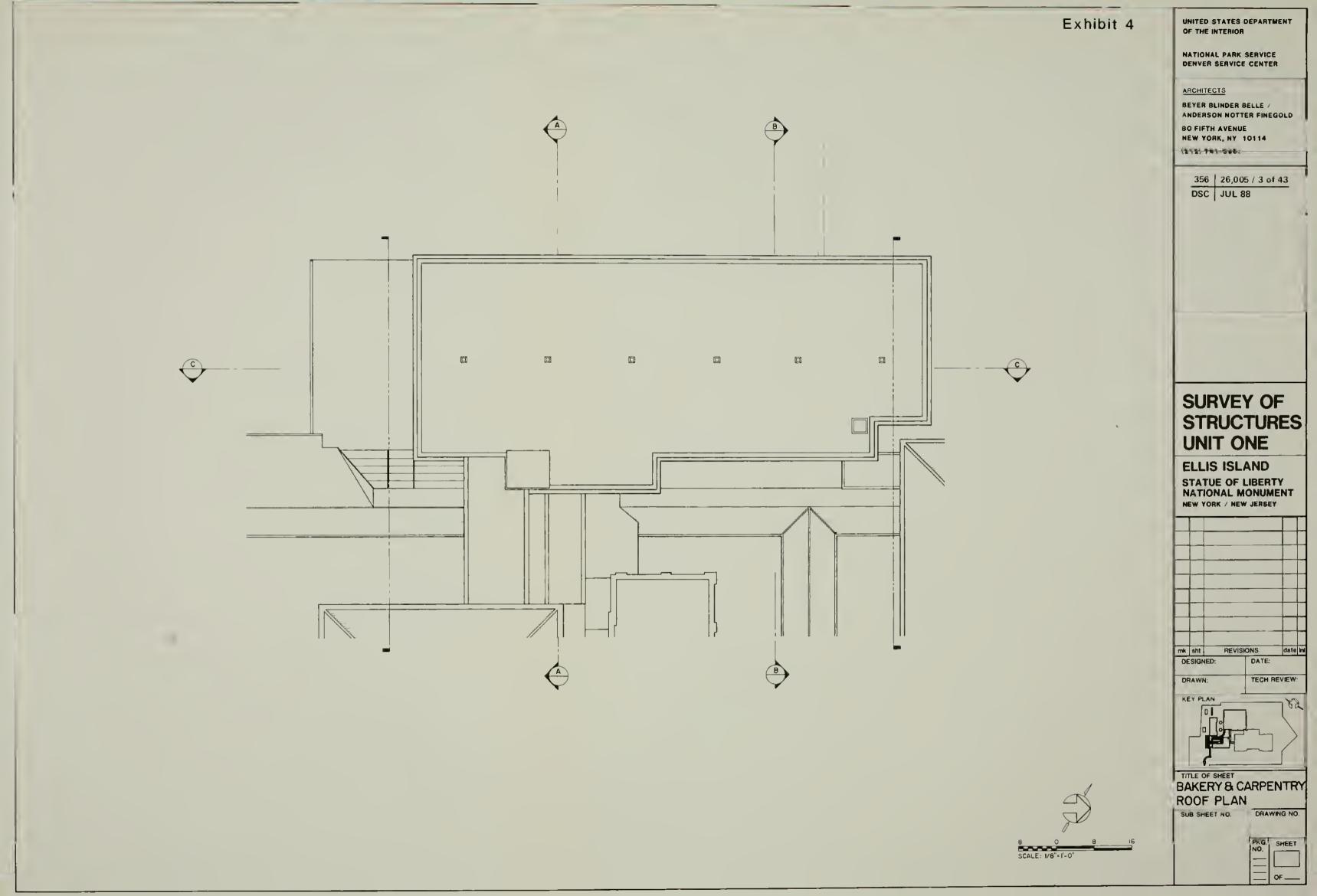
KITCHEN & LAUNDRY

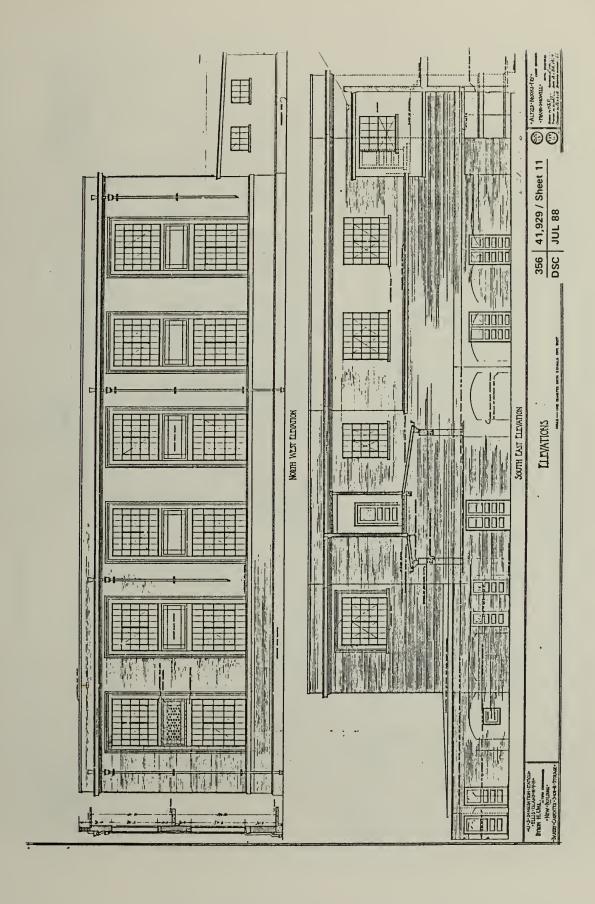
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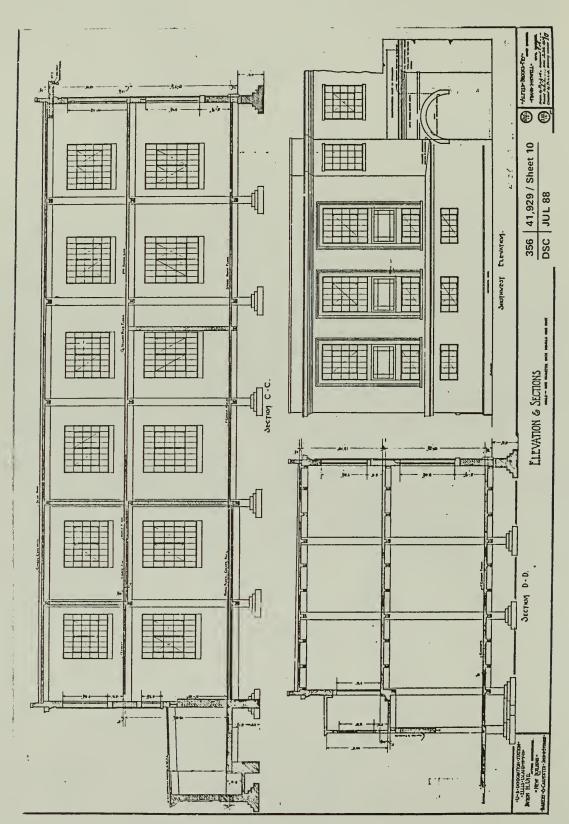
POWER HOUSE

EAST ELEVATION









Southwest elevation and two sections, 1914.

Plan of roof and covered way (H201 of kitchen and laundry building), 1914.



 West and south elevations, one-story oven room, view northeast.



2. south elevation, one-story oven room, view north-east.



3. West elevation, view east.



4. North elevation, view north.



5. East elevation, view northwest.



6. East elevation and roof, view west.



7. Missing downspout and missing brick, west elevation.



8. Foundation crack at juncture of two-story building with one-story oven room, west elevation.



9. Severe cracking at lintel level, west elevation.



10. Spalling at lintel, west elevation.



11. Spalling and loss of material at limestone water table due to rusting pipe anchors.



12. Spalling at limestone window sill joints.



13. Windows, west elevation.

3. Interior

a. <u>Drawings</u>

In August 1934 the architectural/engineering team measured the bakery and carpentry building. "As found" plans and sections were prepared at 1/8" scale (exhibits 8-10). Room identification numbers were assigned by the survey team.

b. <u>History</u>

1. Historical Room Use

The uses of the building remained the same from 1915-1954, with the exception of the bake shop and ovens, which ceased operating sometime in the 1920's (photo 1 and exhibit 11). The original first floor plan designated a general storage room, a lumber storage room, a baking room, an oven room featuring two peel ovens and one draw-plate oven, a fuel room, an elevator, and an elevator machine room. The second floor housed a paint shop, a flour storage room, a carpentry shop (photos 2 and 3), an elevator, and an office (exhibits 12-14). The original plans incorporated a block and tackle over the double doors in the north wall of the carpenter shop for the conveyance of oversize materials. Floor plans of 1952 indicate a baggage room, lumber and general storage rooms on the first floor, and a paint shop, a paint storage room, a carpenter shop, and two store rooms on the second floor. Three balconies or wooden decks were built in both the paint and carpentry shops. Exhibits 15 and 16 depict the historical development and room use of the first and second floors.

2. Historical Finishes

The original finishes have remained unaltered. The wooden storage platforms of rooms 201 and 203 and the wood and glass partitions of office 203C are additions which occurred after 1937. It is likely that these alterations were made by the Coast Guard when it began its occupation in 1939.

c. Description

The bakery and carpentry building is accessible from covered way 5 on the first floor, from the kitchen and laundry building corridor (H2O1) and from the second floor of the powerhouse.

The first floor rooms are uniform in appearance, with concrete ceilings and floors and painted brick walls. Loading hoods for the three ovens are located at the south wall of room 101 (the bake shop). This wall has a rectangular ceramic tile finish (Photos 4 and 5). The oven room, with its stoking pits, was not accessible for survey due to asbestos contamination.

The lumber storage room (room 102) houses a ceiling-high storage framework of wood stud supports and horizontal metal bars. A wooden stair ladder in this room provides access into room 203 above through a trap door.

The second floor brick exterior walls have a painted finish on the interior side and major room partition walls are plastered. Minor partition walls found in room 203 include glazed wood panels (glass destroyed) to form office 203C (photo 7) and vertical wood paneling forming storage rooms 203A and 203B. The west wall of 203A features double six-over-six sash windows above a counter.

Ceilings are reinforced concrete slabs. The dropped wood ceilings of partition rooms 203B and 203C serve as storage platforms (photo 8). The finish flooring is laid on concrete slab in all rooms: the paint shop (room 210) has a cement finish; the flour storage room (room 202) has maple strip flooring; and the carpentry shop (room 203) has 1-1/4" yellow pine flooring.

d. Existing Conditions

In September 1984 a survey of the interior spaces was conducted to evaluate existing conditions. The survey is discussed on page 40. The results of the condition survey have been plotted on graphically-coded floor plans which illustrate the relative condition of each space (exhibits 17 and 18). The complete survey with a full presentation of methodology and criteria is included in Appendix D.

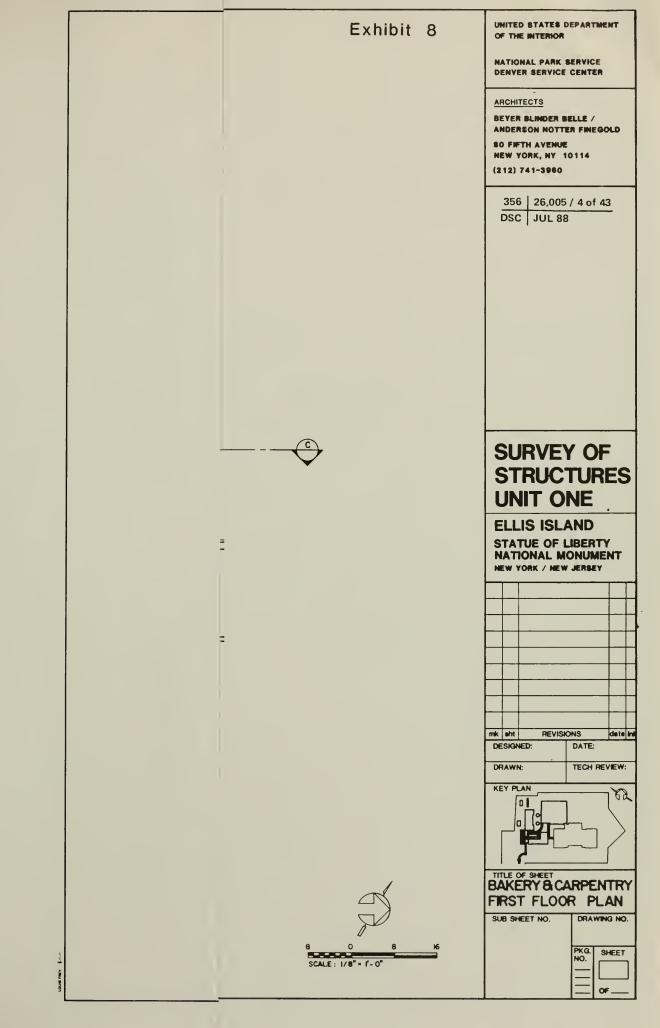
The concrete flooring of the first-story rooms is obscured by debris. The painted finish on all brick walls is peeling and small areas of efflorescence are visible along the west wall. The concrete ceiling finish is intact throughout. The cast-iron stair is heavily corroded and the wood handrail is worn.

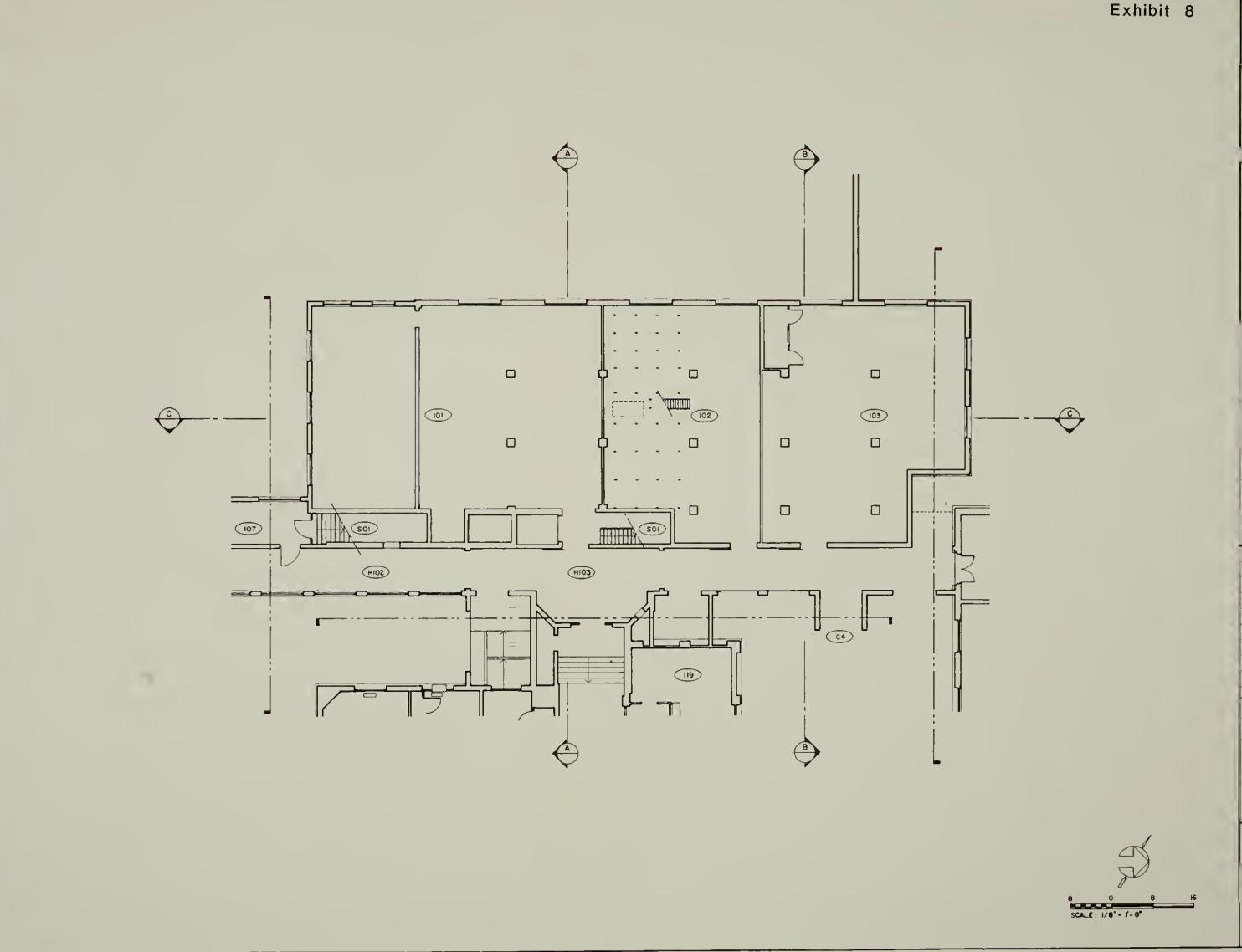
Interior finish conditions are generally good on the second floor, other than peeling on most painted surfaces (photo 9). Cracks in the west wall brick occur in two of the rooms. The wooden plank floors of rooms 202 and 203 are badly worn and damaged. Concrete reinforcing rods in the ceiling have rusted in areas and caused concrete spalling. All glass of the office partitions and storage room in the northeast corner has been destroyed.

e. Architectural Significance

The "Existing Condition Survey" also evaluated the rooms in the bakery and carpentry for architectural significance (a discussion of this part of the survey appears on page 41). The ranking of spaces is relative to the specific architectural context of this building. The findings of architectural significance have been plotted on graphically-coded floor plans (exhibits 19 and 20). The complete survey is included in Appendix D.

The spaces in the bakery and carpentry building are generally undistinguished. All rooms were determined to have minor or negligible significance.





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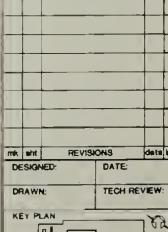
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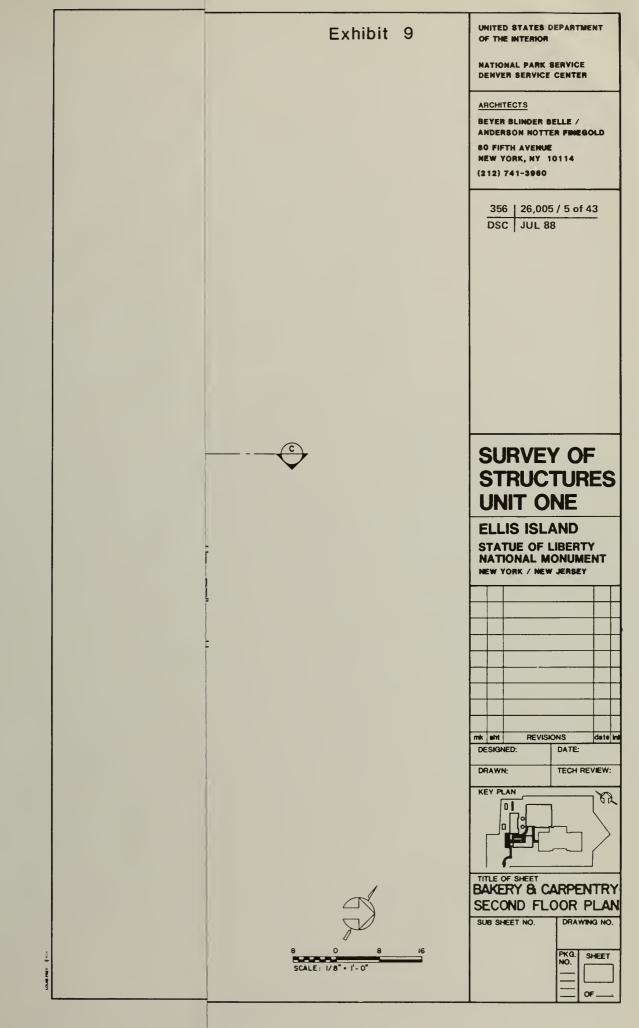


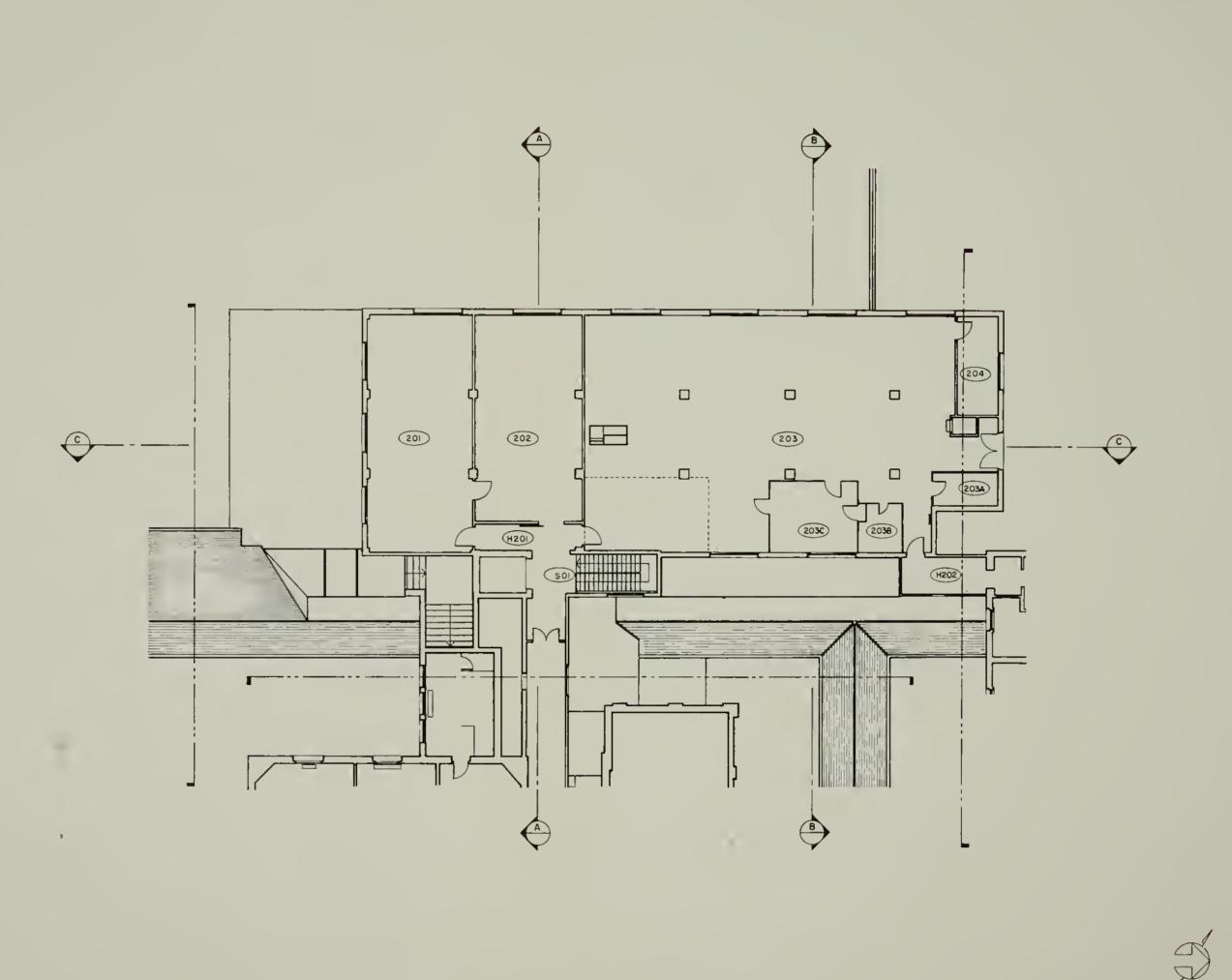
BAKERY & CARPENTRY

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Exhibit 9

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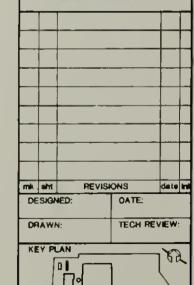
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UNITED STATES DEPARTMENT Exhibit 10 OF THE INTERIOR NATIONAL PARK SERVICE DENVER SERVICE CENTER ARCHITECTS BEYER BLINDER BELLE / ANDERSON NOTTER FINEGOLD 80 FIFTH AVENUE NEW YORK, NY 10114 (212) 741-3980 356 26,005 / 6 of 43 DSC JUL 88 **SURVEY OF STRUCTURES UNIT ONE ELLIS ISLAND** STATUE OF LIBERTY **NATIONAL MONUMENT** NEW YORK / NEW JERSEY mk sht REVISIONS date inf DESIGNED: ECH REVIEW: DRAWN: KEY PLAN TITLE OF SHEET BAKERY & CARPENTRY **SECTIONS** SUB SHEET NO. DRAWING NO. PKG. NO. SHEET

Exhibit 10

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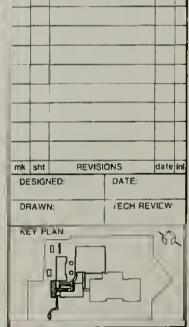
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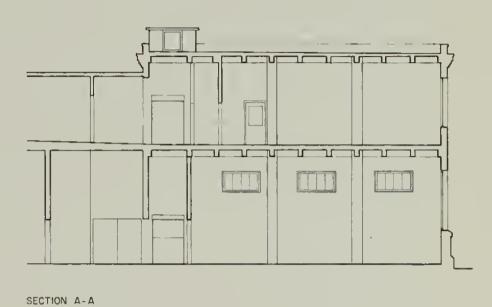
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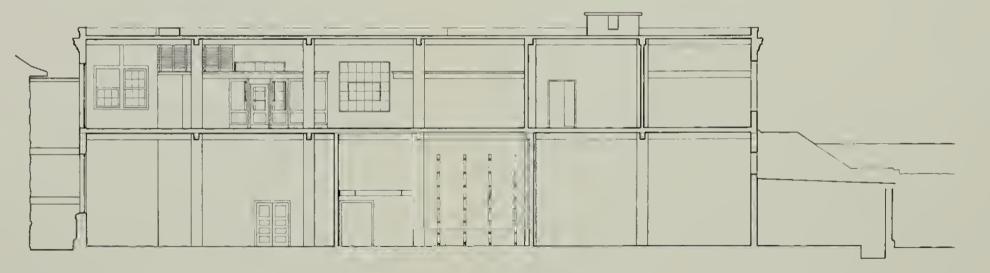
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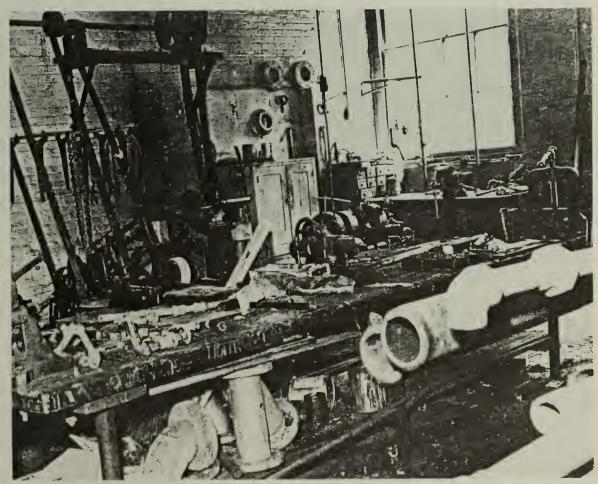
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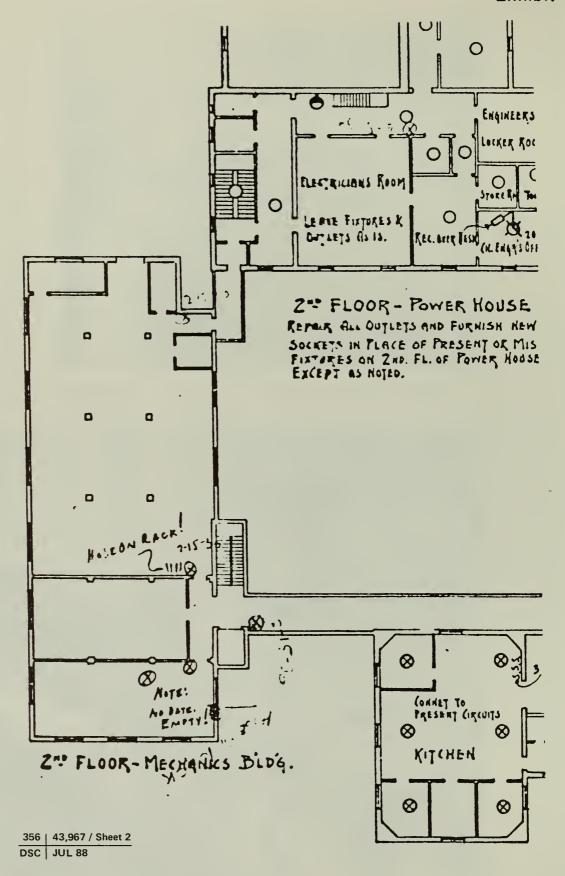
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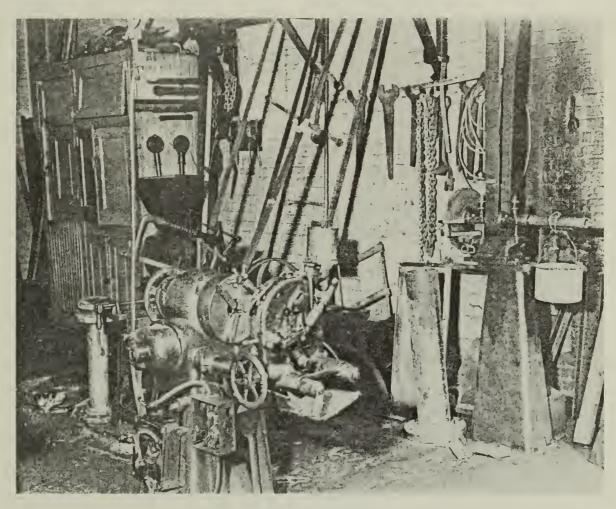
1. Room 101- south tiled wall. No date. "The bakery showing rack of fresh bread". United Press International.



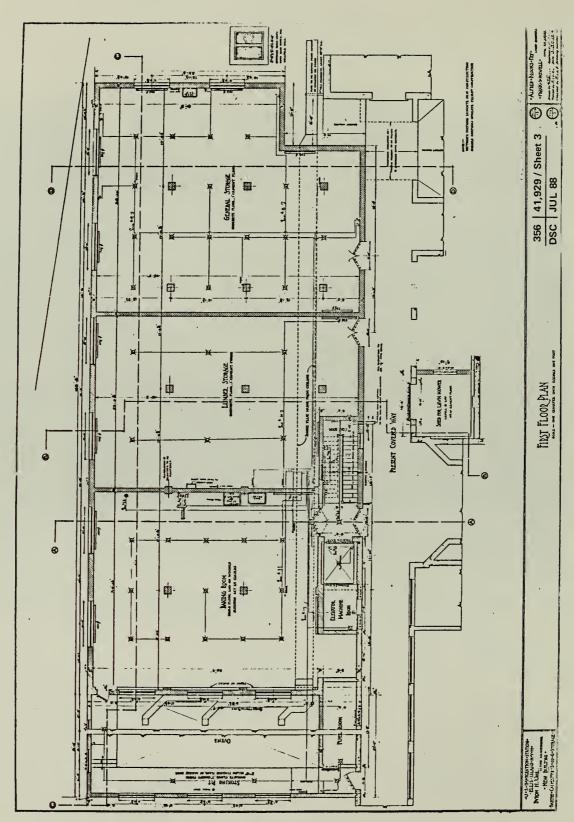
2. Room 203-view of southwest corner. "Machine shop and repair shop", (WWII?) U.S. Immigration and Naturalization Service, Washington, D.C.



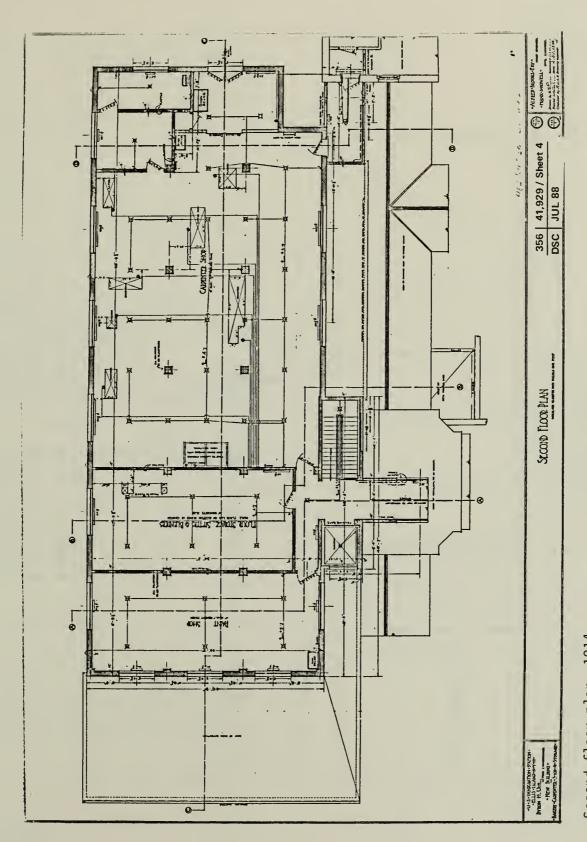
Portion of Drawing #D1034-"Electrical installations, Island 1" 1927.



3. Room 203- view of south wall. "Machine shop, maintenance section", WWII(?) U.S. Immigration and Naturalization Service, Washington, D.C.



First floor plan, 1914.



Second floor plan, 1914.

First floor Block Plan of 1916- Bakery and Carpentry Shop at left.

356 | 26,005 / 7 of 43 DSC | JUL 88

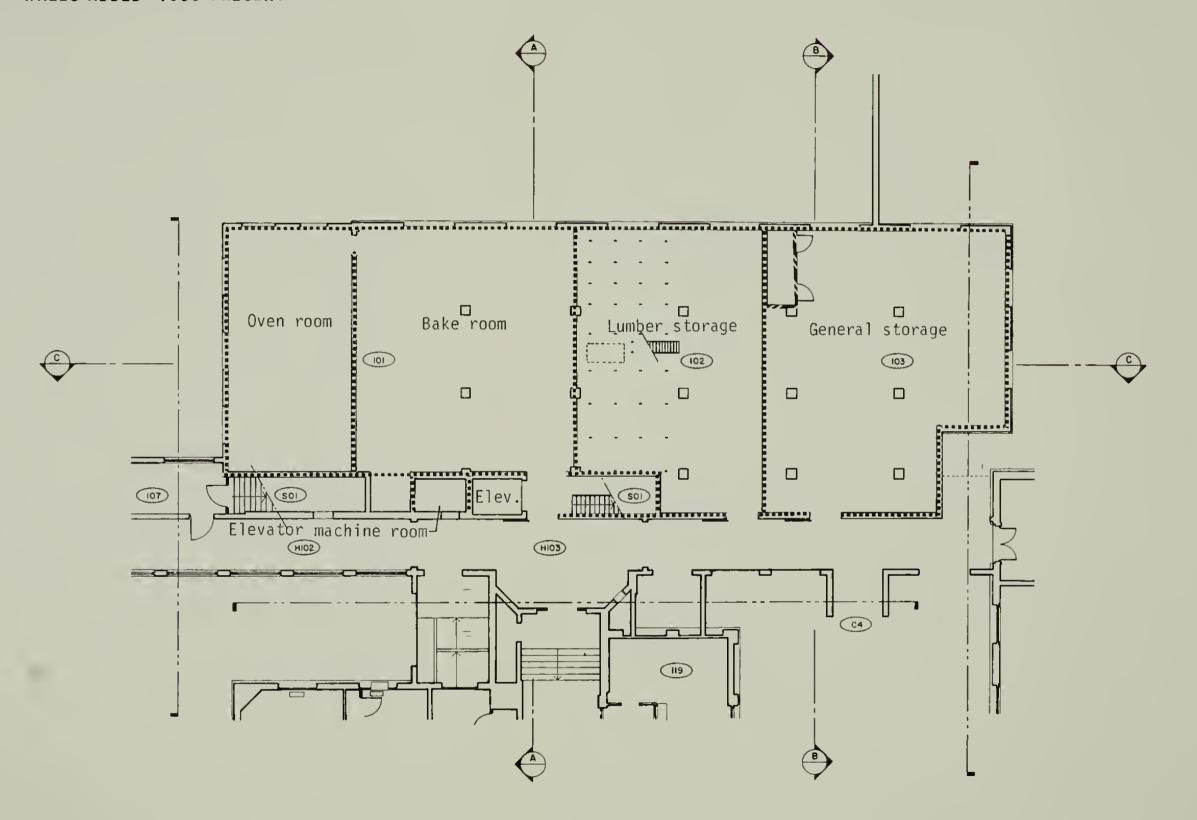
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..... ORIGINAL WALLS 1915-1923

---- WALLS ADDED 1924-1938

WALLS ADDED 1939-PRESENT



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Exhibit 15

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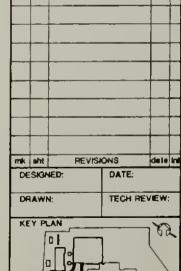
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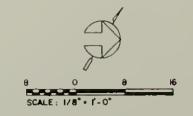
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Exhibit 16

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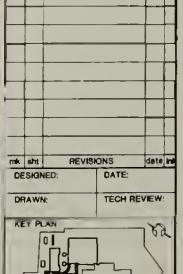
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BAKERY & CARPENTRY
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4. Room 101- bake shop, looking west.



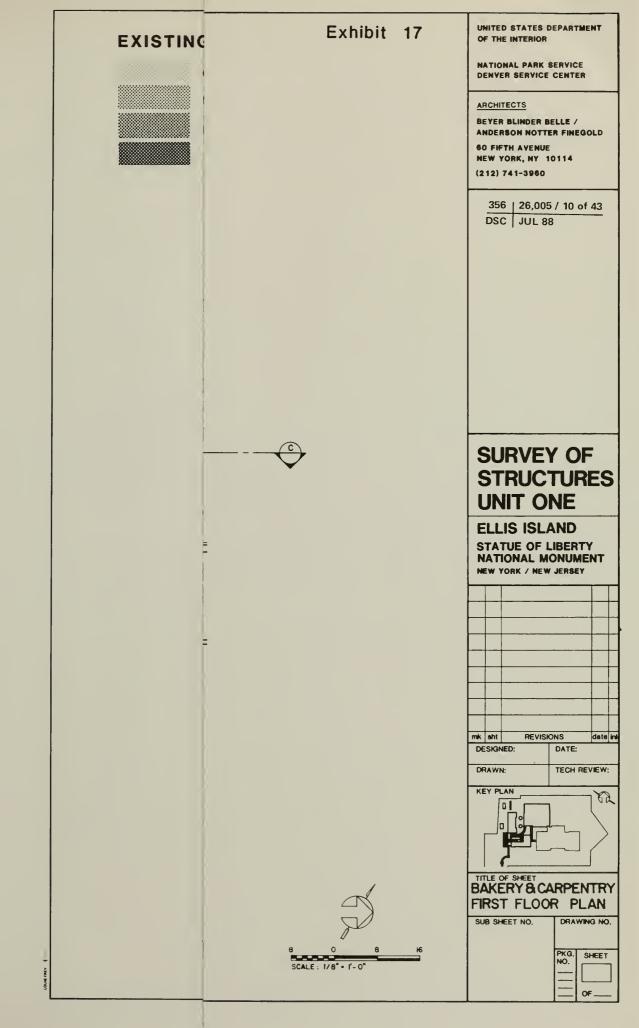
5. Room 101- south wall, one of three oven loading hoods-"Middleby Oven Co., N.Y."

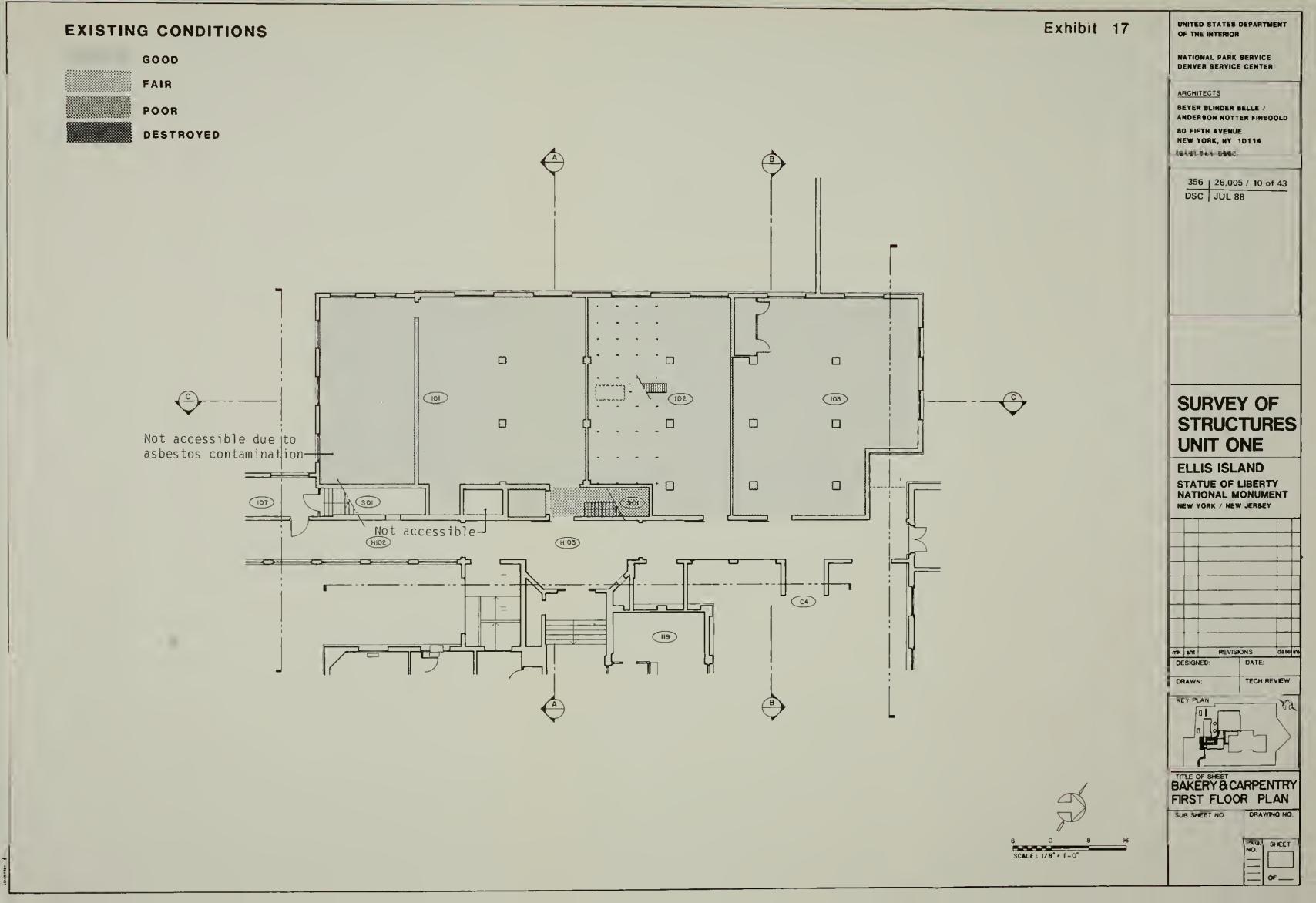


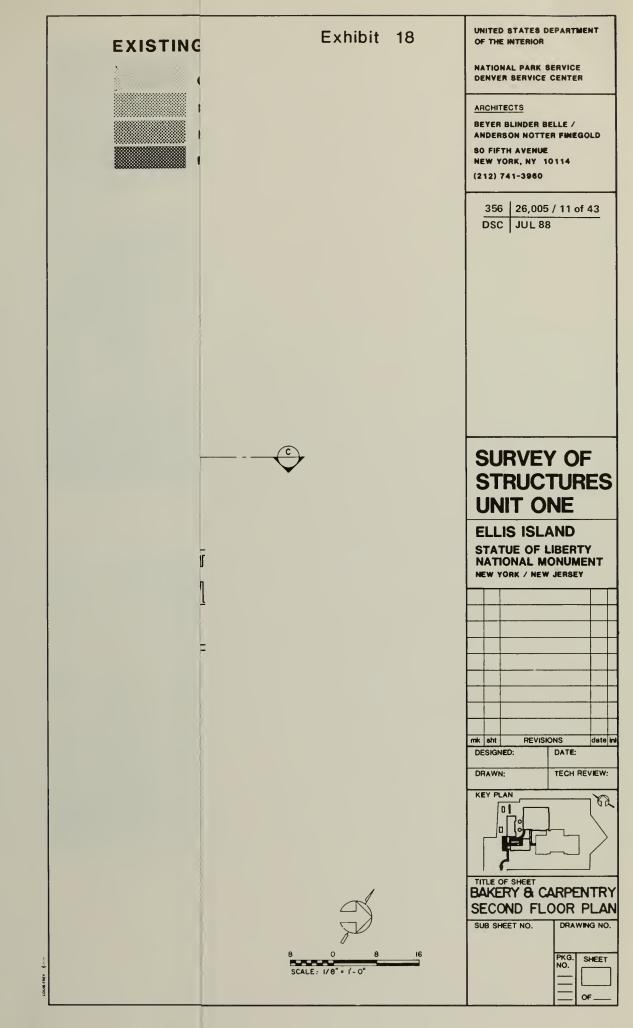
6. Room 102- lumber store room, lumber storage rack at left.

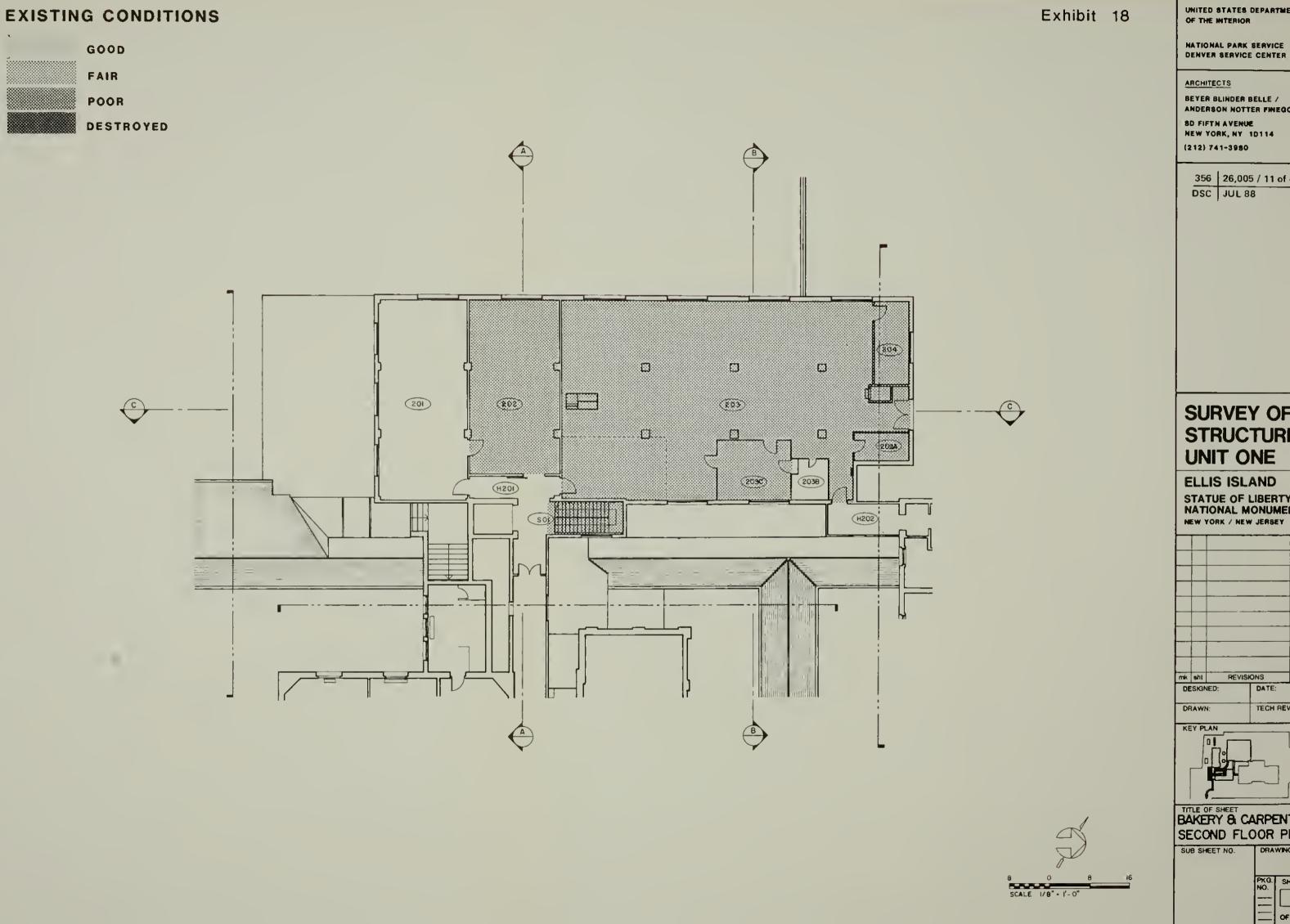


7. Room 203C- wood partitions forming office in room 203.









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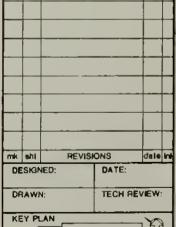
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TITLE OF SHEET BAKERY & CARPENTRY

SECOND FLOOR PLAN DRAWING NO. SUB SHEET NO.

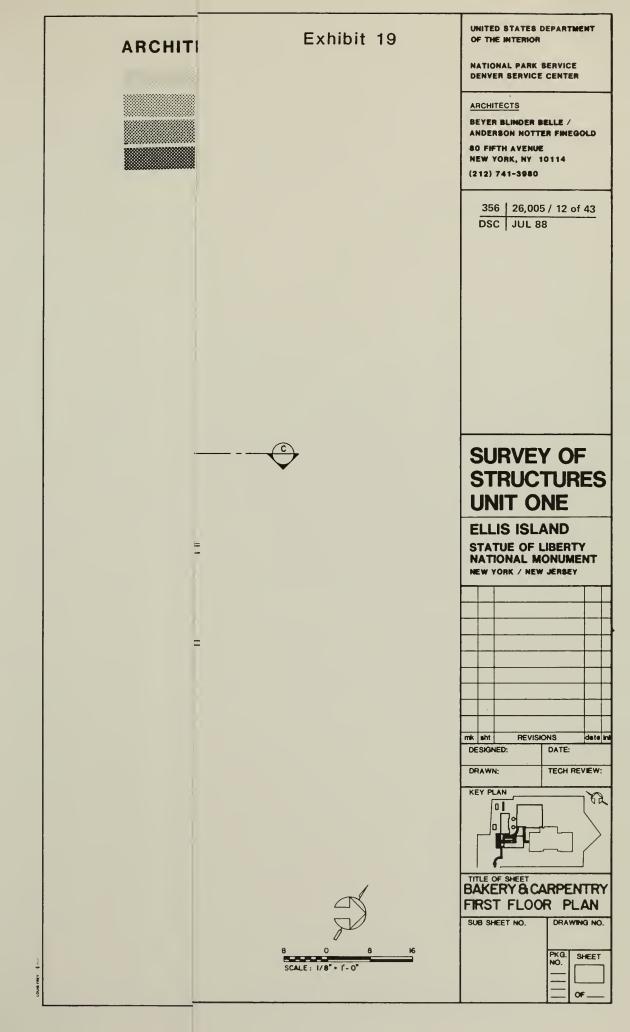


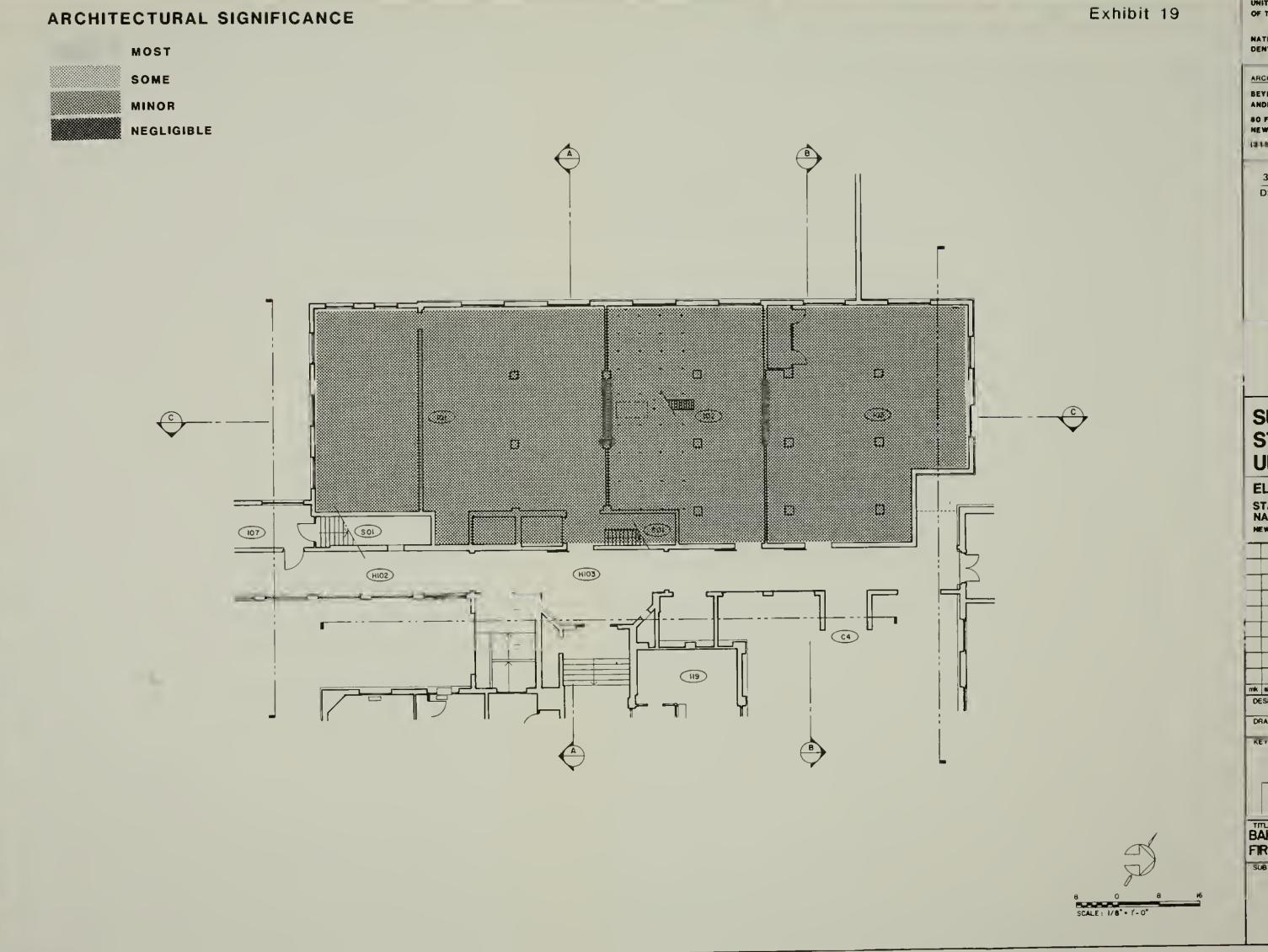
8. Room 203- storage platform forming ceilings of rooms 203B and 203C.



9. Room 202- Peeling paint on brick outside wall, plastered room wall at left, wood flooring.







UNITED STATES DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE DENVER SERVICE CENTER

ARCHITECTS

BEYER BLINDER SELLE / ANDERSON NOTTER FINEGOLD

80 FIFTH AVENUE NEW YORK, NY 10114

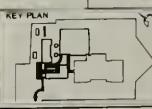
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356 | 26,005 / 12 of 43 DSC JUL 88

SURVEY OF STRUCTURES UNIT ONE

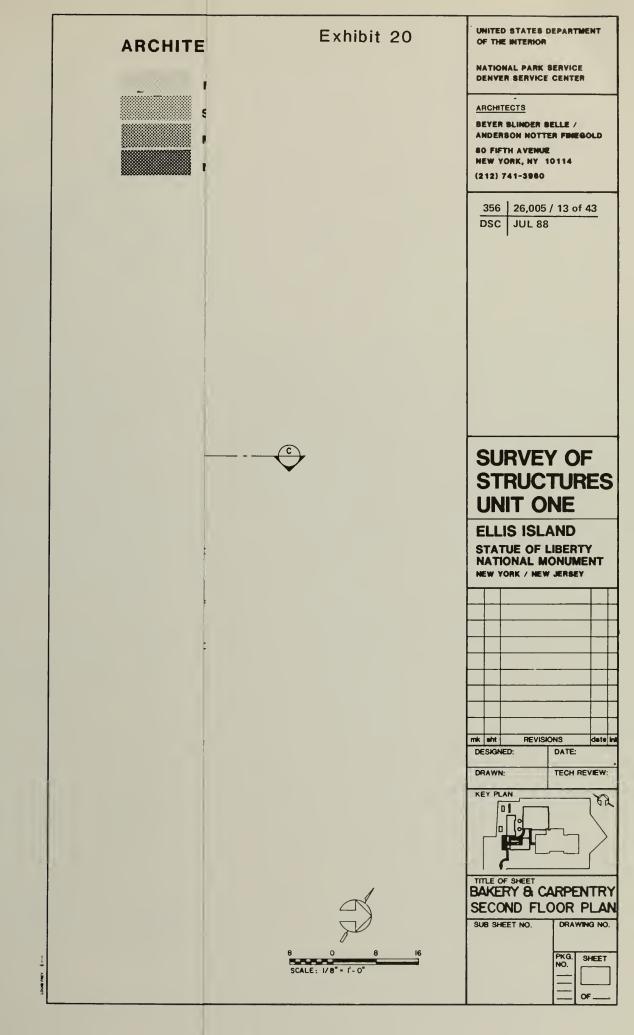
ELLIS ISLAND STATUE OF LIBERTY NATIONAL MONUMENT NEW YORK / NEW JERSEY

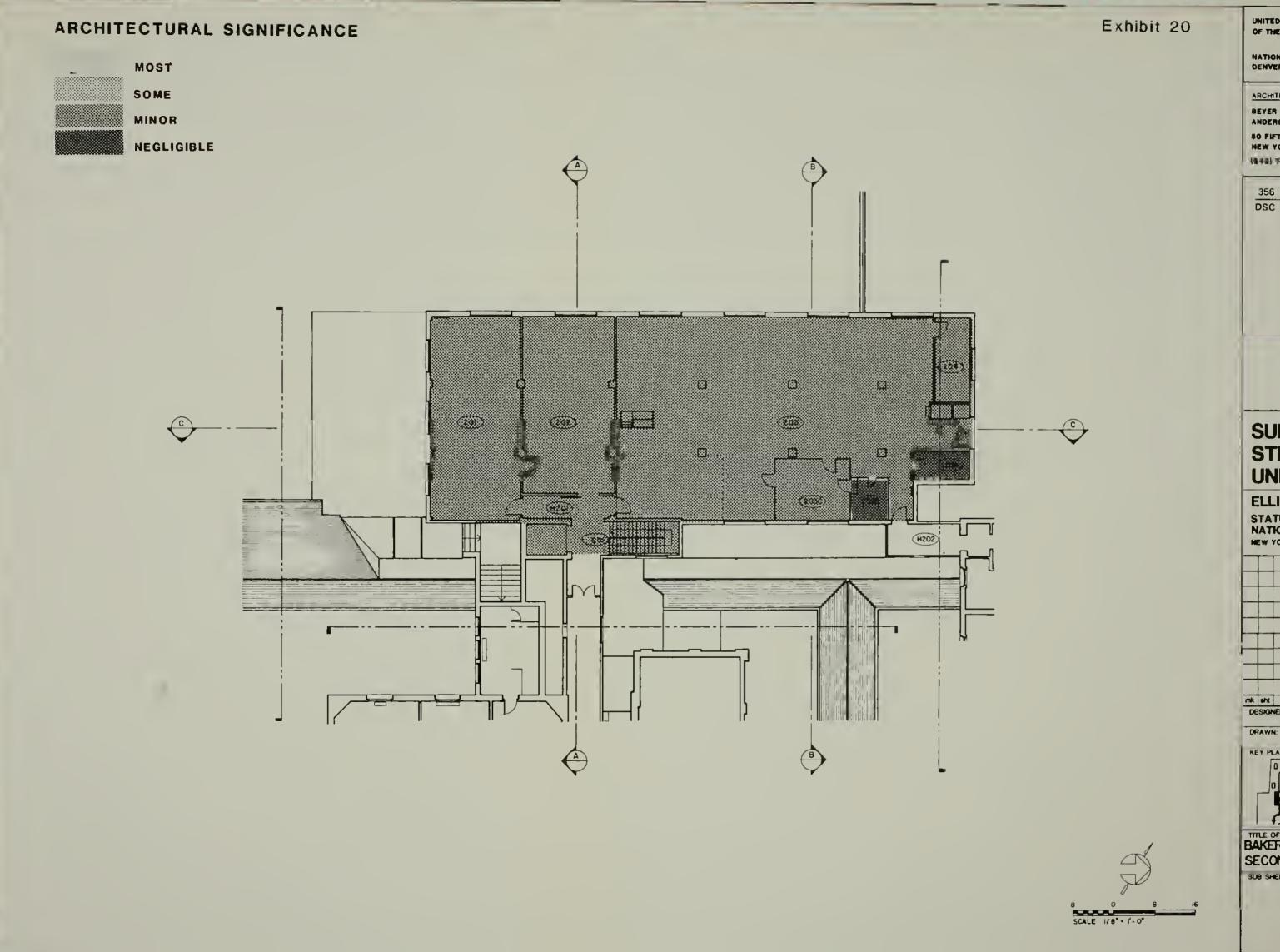
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BAKERY & CARPENTRY FIRST FLOOR PLAN DRAWING NO.

SUB SHEET NO.





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356 | 26,005 / 13 of 43 DSC JUL 88

SURVEY OF STRUCTURES **UNIT ONE**

ELLIS ISLAND

STATUE OF LIBERTY NATIONAL MONUMENT NEW YORK / NEW JERSEY

REVISIONS DESIGNED: DRAWN: TECH REVIEW: KEY PLAN

TITLE OF SHEET
BAKERY & CARPENTRY SECOND FLOOR PLAN

SUB SHEET NO.

DRAWING NO.

4. Mechanical Systems²

a. Electrical

Electric power was brought from the powerhouse through the attic of covered way 5 to power panels for lighting and the shops of the bakery and carpentry building. All wiring is copper with rubber/cambric insulation and is installed in steel conduit. Lighting fixtures are primarily RLM-type incandescent fixtures and ceiling-mounted metal fixture receptacles (photos 1 and 2). Some fluorescent troughs are located on the first floor. Exhibit 21 depicts the original second floor wiring plan. A fire alarm system using coded pull stations and bells is provided for in the building.

All electrical panels are badly deteriorated through corrosion and vandalism. The back boxes might be reusable after thorough cleaning and inspection. Conduits, pull boxes, and other raceway components are generally corroded and not serviceable. All wiring is no longer usable.

The RLM lighting fixtures are in need of refurbishment. The fire alarm system is obsolete and all equipment is in bad condition and beyond practical retrieval.

b. <u>Heating and Ventilation</u>

Low pressure steam was supplied to this building from the powerhouse central piping distribution system which

²Based on Syska & Hennessy, Inc., "Ellis Island; Historic Survey Report; Mechanical Systems," December 1984.

was located in the overhead piping space of covered way 5 (C-5). Parallel piping clusters were used in spaces on the first floor and sectional cast-iron radiators were used in the remaining spaces (photo 3).

Sectional cast-iron radiators probably could be reused after thorough cleaning and testing. None of the existing piping can be retained due to the advanced state of deterioration.

c. Plumbing

Domestic cold water is fed to the bakery and carpentry building from an eight-inch cold water main running from the powerhouse through covered way 5 (C-5). Fixtures are located only on the second floor. A pedestal sink is found in room 202 while rooms 201 and 203 have wall-mounted sinks (photo 4). Aluminum shower stalls are located in rooms 202 and 203 (photo 5). Existing sinks could be reused after thorough cleaning. All water supply piping is in need of replacement.

The building is fully sprinklered for fire protection. The supply to the sprinklers is provided from a four-inch salt water main in covered way 5. Sprinkler piping appears to be in an acceptable condition but the sprinkler heads are in need of replacement.

d. <u>Elevators</u>

The elevator, located at the east wall of the building, served both floors and was controlled by car switch operation. The geared, drum type hoisting machine is located adjacent to the hoistway on the first floor. The hoistway entrances have manual, vertically rising, expanded metal gates (photos 6 and 7).

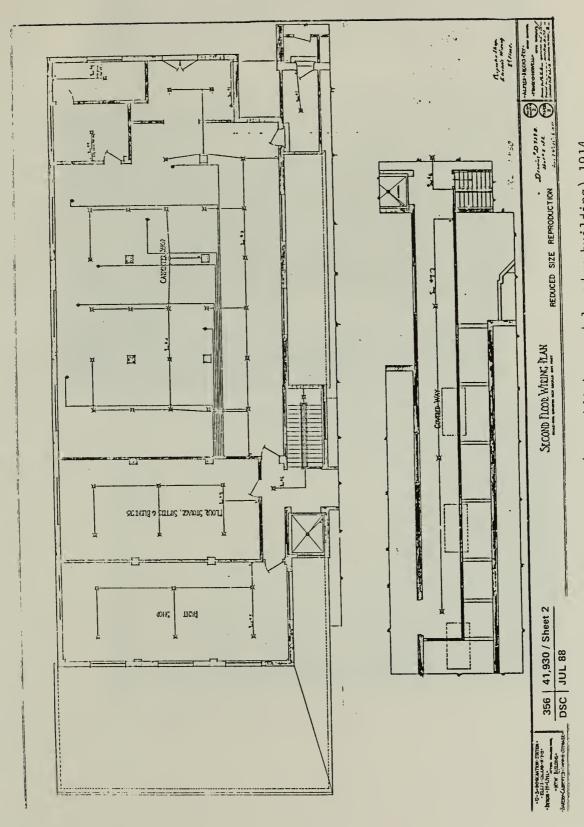
The suspension ropes for the elevator have been disconnected and the car and counterweight are resting at the bottom of the hoistway. However, the hoistway doors have not been permanently barricaded or sealed in the closed position on the hoistway side as required by the present elevator code. All machine room equipment, including the hoisting machine and control panels, is badly corroded. The cab floor is covered with debris and the interior is badly deteriorated. All hoistway equipment, such as guide rails, sheaves and overhead sheave beams are rusted. The elevator is in such an advanced state of deterioration that it is not reusable.



1. RLM-type fixture, c. 1935, room 103.



2. Porcelain socket ceiling mounted lamp, room 101.



Second floor wiring plan and corridor plan, (into kitchen and laundry building) 1914.



3. Sectional radiator on pads, c. 1915, room 101.

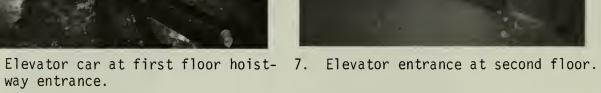


4. Wall-mounted slop sink, c. 1940's, room 203.



5. Pedestal sink (c. 1920's) and aluminum enclosed shower (c. 1940's), room 202.





5. Structural System³

a. Description and Existing Conditions

The structure is two stories with exterior brick bearing walls, a flat roof, and no basement. A one-story bake shop (room 101) is located at the south. The second floor and roof are framed with wood-formed concrete slabs on structural steel beams and columns; spandrel beams bear on exterior walls. Beams are encased in concrete fireproofing, while columns are enclosed with plaster fireproofing.

A variety of cracks are found at the underside of the second floor slab (first floor ceiling) in a north-south or east-west direction (photo 1). One of these cracks extends vertically down a west wall. A severe diagonal crack has also occurred on the south wall of room 103. In the one-story bake shop (room 101), structural cracks approximately 1/16" wide appear on the underside of the roof slab running diagonally across the northwest corner (photo 2). Additional roof slab cracks running north-south are severe, with some exposed slab reinforcing. There is a vertical crack in the north wall along the west side of the door (photo 3).

Ceiling cracks occur on the second floor in a similar pattern to those at the first floor ceiling. For the full length of the west wall and at the west end of the north wall horizontal cracking occurs at the level of the window tops (photo 4). The cracks occurring in the floor and roof slab were caused by temperature-related building movement.

³Based on Robert Silman Associates, P.C., "Ellis Island; Historic Structures Report; Structural Systems," November 1984, pp. 2, 7-8.

Severe horizontal cracking on the exterior is similar in location and extent to the cracking on the interior walls. Rusting of the flanges of the roof spandrel beams has caused brick to be pushed out at these exterior cracks (photo 5). In addition, a diagonal crack was found where the north wall joins covered way 5 near the powerhouse (photo 6).

b. Recommendations

Cracks occurring in the floor and roof slab have been caused by expansion and contraction of the building and do not constitute unsafe conditions. No remedy is required as they tend to relieve the stresses caused by thermal related movement. Vertical wall cracks should have expansion joint material installed to forestall future cracking.

The rusting of beam flanges is causing horizontal wall cracks. Remedial measures include the removal of outside brick, determining the extent of damage and executing necessary reinforcing, cleaning, corrosion proofing and painting.



1. Crack in underside of second floor slab.



2. Crack at northwest corner of room 101.



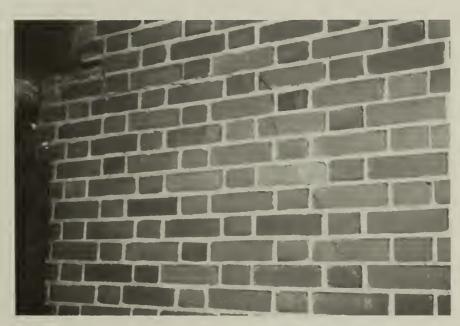
Crack along west side of door, north wall, room 101.



4. Crack at level of window tops, west wall, second floor.

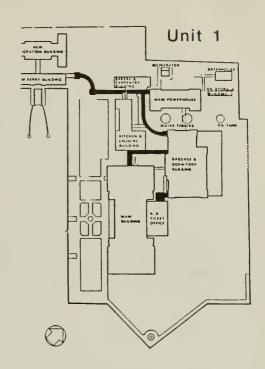


5. Brick pushed out at crack along second floor window tops, west elevation.



6. Crack on north elevation, near covered way 5.





E. CORRIDORS AND COVERED WAYS



"All of the buildings are connected by means of corridors and covered ways so that persons, baggage and necessary supplies may be transported from one building to another in an efficient manner without exposure to inclement weather" 1

These structures, referred to on plans as corridors, passageways, covered ways and covered passages, have been numbered for convenience of discussion.

1. Drawings

In August 1984 the architectural/engineering team measured the corridors and covered ways. Drawings at 1/8" scale were prepared that depict the "as found" conditions. They are included in the discussion of each individual structure. Room identification numbers were assigned by the survey team.

In August 1984 a survey of the interior spaces was conducted to evaluate existing conditions and architectural significance. For the larger structures (C-2 and C-5), the results of the condition survey have been plotted on graphically-coded floor plans which illustrate the relative condition of each space. These are included in the discussion of the individual structures. The complete survey with a full discussion of methodology and criteria is included in Appendix D.

¹A Study of Housing Facilities at the U.S. Immigration Station at Ellis Island, N.Y., Record Group 85, National Archives, 1923, p. 4.

2. Corridor 1 (C-1)

a. <u>Historical Development</u>

Boring and Tilton's 1901 plans for the kitchen and laundry building included the construction of a two-story corridor that would connect the new building with the main building. The first floor served as a passage to the ferry waiting room to the west. On the second floor the corridor continued into the building, divided by a wire partition to form separate women's and men's passageways. This division was most likely removed in 1908 or 1909, when the dormitories were relocated to the new baggage and dormitory building. Sometime between 1904 and 1913 a door was cut into a window at the second floor north elevation for an exterior stair leading down to the courtyard (exhibit 1). This doorway was filled in and the stair removed in 1936-1937.

b. Exterior

The two-story corridor between the kitchen and laundry and the main building is a steel frame and terracotta block structure clad in red brick laid in Flemish bond. It has a granite base, bluestone basement window sills, and limestone water table, first floor sill course, and trim. The flat roof is sheathed in tar paper. A copper cornice surmounted by a brick parapet and limestone coping crowns the elevations (photos 1-3).

The corridor is three bays wide at the south elevation and two bays wide at the north. Window enframements are segmentally arched. First floor windows are two-over-two double-hung wood sash with three-light transoms. Second floor windows are eight-over-two with one

eight-over-four. One original second story window on the north elevation (later a doorway) has been filled in with brick. The central bay on the south elevation is an entrance with granite stairs and limestone handrails. The doorway has a pair of paneled wood doors with single wire glass lights and a six-light segmentally arched transom. The windows on the north elevation have wire mesh window guards. The exterior elevations are shown in exhibit 2.

The limestone is generally in good condition. The brickwork has experienced some surface spalling and loss of mortar. A number of bricks are missing at the top southwest corner on the south elevation and at the west of the north elevation. Severe efflorescence is extensive on both facades (photos 4 and 5). Biological staining is pronounced at the juncture of the north elevation and corridor 2 as well as at the base (photo 6). Biological and copper staining are present on the limestone handrails. staining is visible on the water table below a pipe at the south elevation and on the sills under the window quards on the north elevation. The cornice is bent and corroded at the north elevation.

c. Interior

The first floor passageway of C-1 is undivided and the second floor has one partition at the western end. Plans and sections are shown in exhibits 2 and 3. Both floors of the corridor are protected by wood railings along the center of the corridors with overhead plywood protection (photos 7 and 8). A wooden ramp on the second floor covers the four steps up to the main building. The first floor has concrete flooring and a cement plaster wainscot in good condition. Some vertical cracking occurs in the wainscot. Flooring and wainscot are tiled on the second floor in 3/4"

square ceramic white tile with a black fret border on the floor and bands of black and red tile in the wainscot. This tile exhibits some vertical cracking but is generally in good condition (photo 9).

A majority of the plaster of the original ceilings has been destroyed, including the metal lath. Over 80% of the plastered walls have been destroyed, exposing large areas of terra-cotta block fireproofing.

d. Mechanical²

The corridor was heated by two-pipe sectional castiron radiators. The steam risers were fed from a main located in the basement level. Radiators probably could be used after thorough cleaning, but none of the existing piping can be retained due to its advanced state of deterioration.

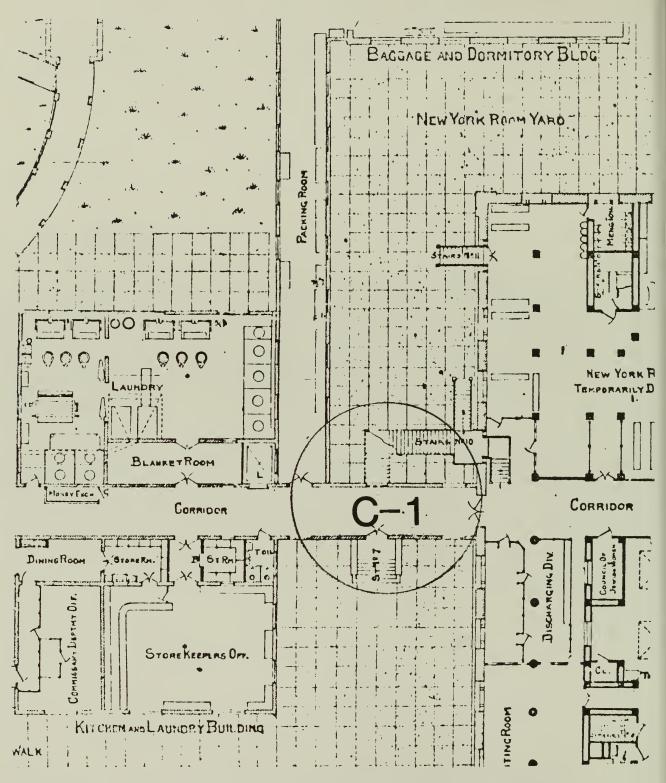
Lighting fixtures are missing and there were no plumbing fixtures installed on either floor.

²Based on Syska & Hennessy, Inc., "Ellis Island; Historic Survey Report; Mechanical Systems," December 1984.

e. Structural³

The north parapet was found to be leaning outward to the north approximately 4" to 5" and constitutes a dangerous condition. This parapet should be removed and rebuilt using modern methods as soon as possible.

³Based on Robert Silman Associates, P.C., "Supplement to Ellis Island; Historic Structures Report; Structural Systems," December 1984, pp. 2, 5.



First floor, Block Plan of 1916, illustrating exterior north door and stair of Corridor 1.

356	26,005 /	14	of	43
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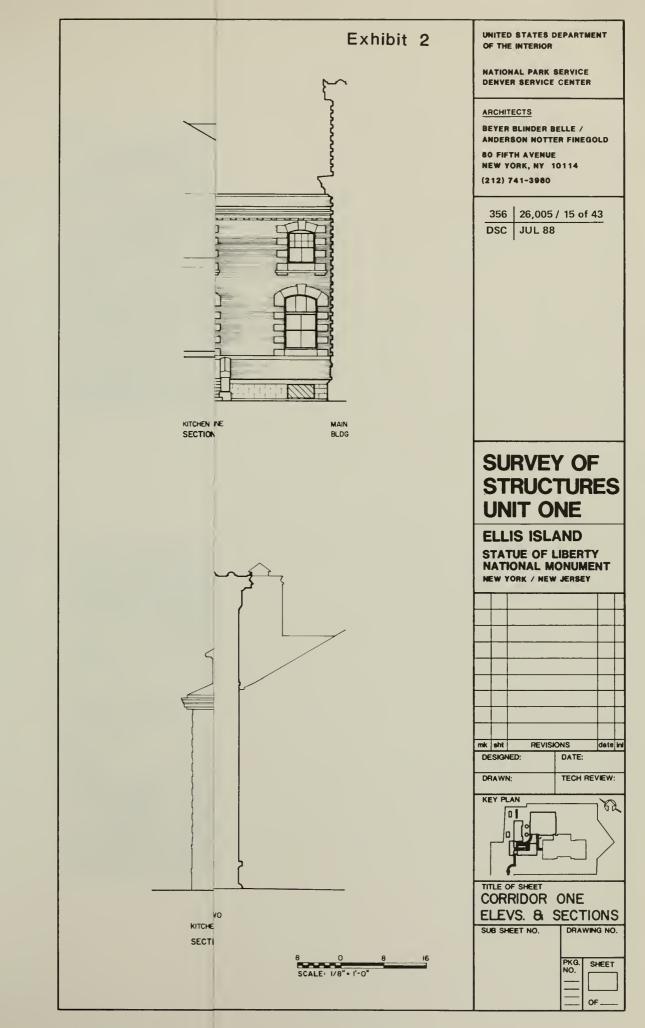


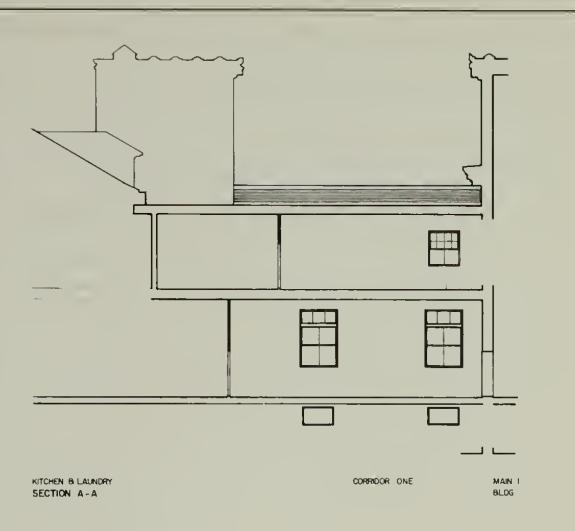
1. South elevation, view north.

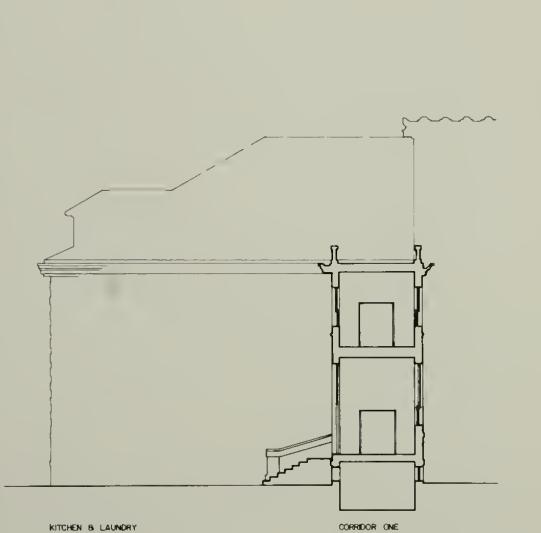


2. North elevation, view south.

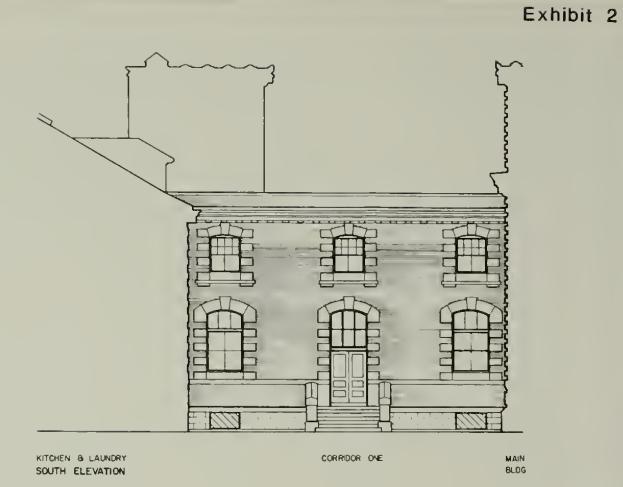


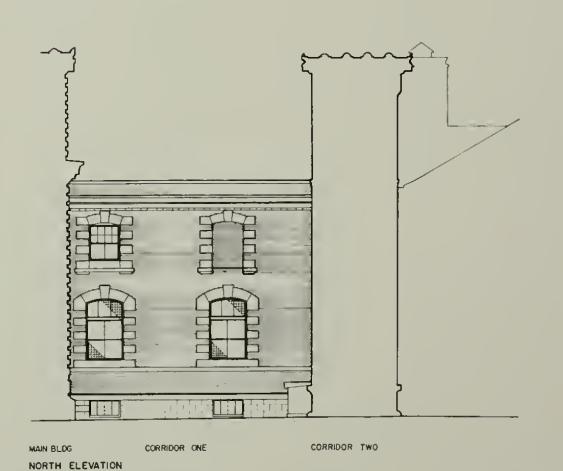






SECTION 8-8





UNITED STATES DEPARTMENT

MATIONAL PARK SERVICE DENVER SERVICE CENTER

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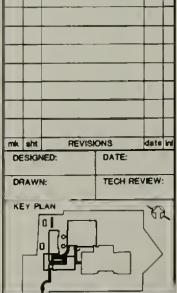
356 | 26,005 / 15 of 43

DSC JUL 88

SURVEY OF STRUCTURES UNIT ONE

ELLIS ISLAND

STATUE OF LIBERTY NATIONAL MONUMENT NEW YORK / HEW JERSEY



TITLE OF SHEET
CORRIDOR ONE
ELEVS. 8 SECTIONS

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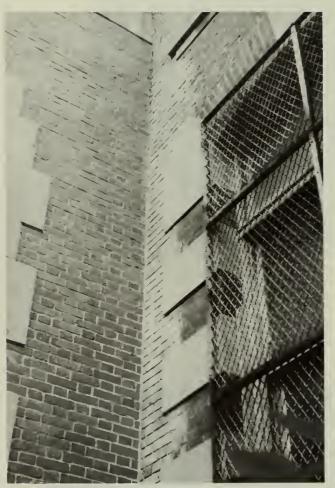
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3. North elevation and roof, view southeast.



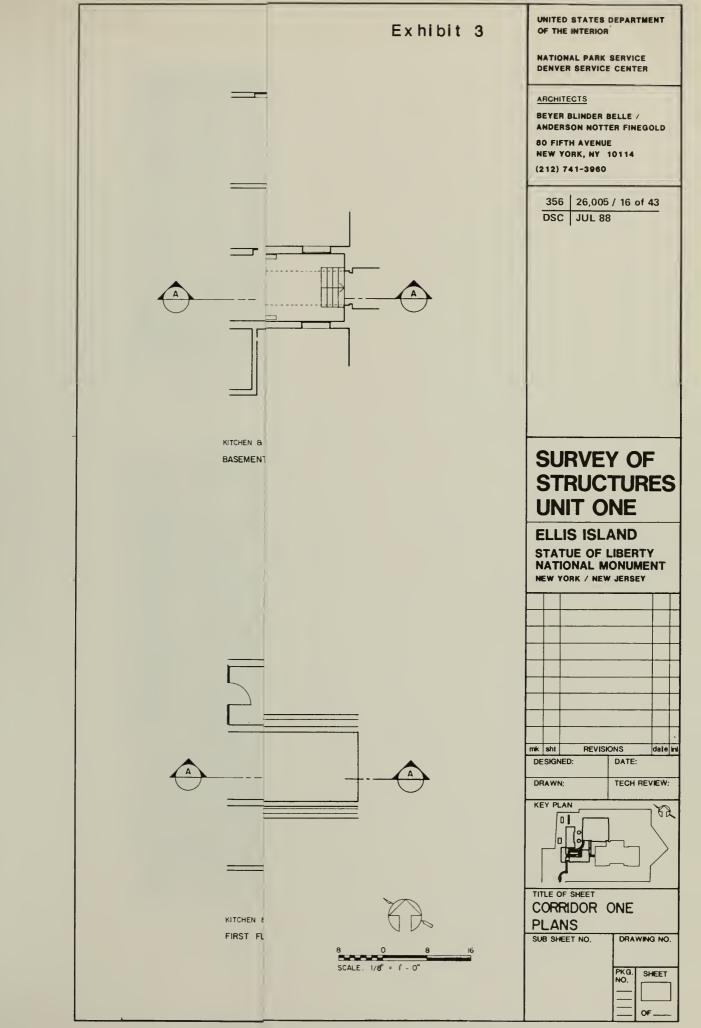
4. Efflorescence, south elevation.

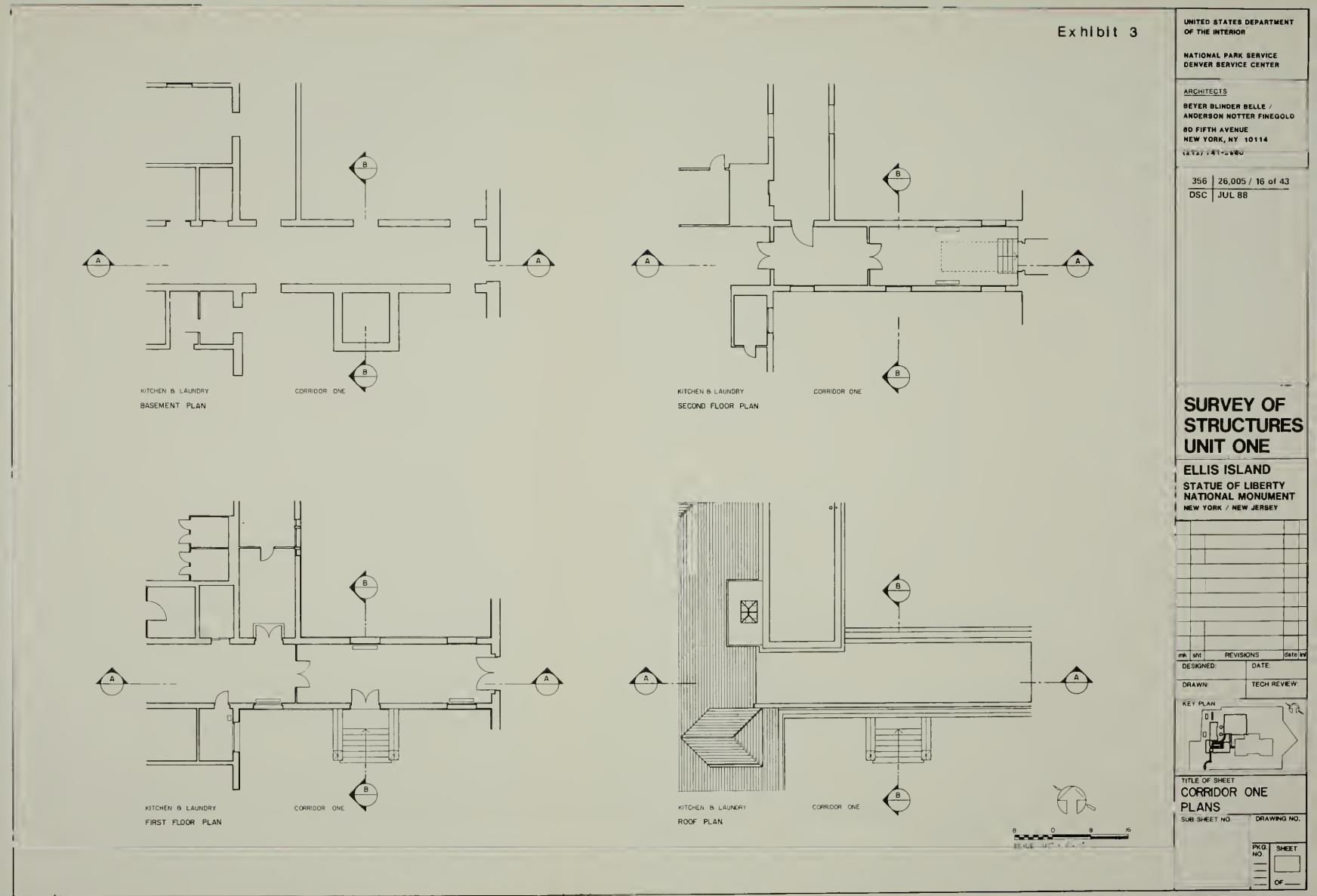


5. Efflorescence, north elevation at juncture with main building.



Biological staining, north elevation at juncture with corridor 2.







 First floor of C-1 looking east to main buildingtemporary wood railings and overhead protection.



8. Second floor of C-1 looking west into dining room of kitchen and laundry building.



 Banded tile wainscot with fret tile floor border found on second floor of C-1.

3. <u>Corridor 2 (C-2)</u>

a. Historical Development

The three-story corridor linking the baggage and dormitory building and the kitchen and laundry building, C-2, was constructed concurrently with the baggage and dormitory building. The first two floors were completed in 1909. The southern end of the two-story corridor abuts the east wall of the kitchen and laundry building and connects with corridor 1 at the south end. Three windows on the first floor of the kitchen and laundry building were furred, plastered and finished to match that of the new corridor, and one window on the second floor became a doorway. Both stories were finished with tile floors and wainscots and plastered walls and ceilings with oak trim.

The first floor sloped up at the southern end to the level of the kitchen and laundry building floor. Only two room use designations could be found for this space. A plan of 1916 denotes this space as "Packing Room" and a 1935 plan "Space Available for labels this floor as Organizations." A 1937 "General Plan" indicates the existing partition locations. The southern ramp was covered with a wooden platform to level the floor and form two rooms. To the north of these rooms, a mezzanine level was created, consisting of two rooms, two toilets and a short Doorways were cut into two of the arched west hallway. windows to provide access to covered way 4 (C-4).

The second floor remained open as a direct link from the dormitories to the dining room of the kitchen and laundry building. The housing report of 1923 reports that this corridor was divided into two portions by a rope balustrade; one part being used for visitors and detained

immigrants and the other for normal traffic between the buildings. $^4\,$ A new tile floor was installed in 1933 by Continental Tiling Co.

The third floor was added concurrently with the third floor of the baggage and dormitory building in 1914. It was designed to match the existing structure except for window type. This floor provided access to the kitchen and laundry building via the elevator at the south end. The housing report of 1923 notes that a kindergarten was provided on this floor, "equipped in the usual fashion with small chairs and a piano." Photo 1 depicts this floor in use as a classroom in 1947. An east-west plywood partition divides the floor into two long rooms.

b. Exterior

The three-story corridor between the kitchen and laundry and the baggage and dormitory is a steel frame and terra-cotta block structure clad in red brick laid in Flemish bond. It has a granite base, limestone trim, a terra-cotta cornice, and copper cheneaux. The flat roof is sheathed in tar paper (photos 2-5).

The corridor is seven bays wide at the east elevation and five bays wide at the west. First floor windows are arched with nine-over-nine-over-nine wood sash and sidelights. The lower lights are double-hung, while the upper ones are pivotal. Second and third story windows are of the paired four-over-one double-hung type with pivotal transoms; second story windows are wood sash while third

^{4&}quot;Study of Housing Facilities," p. 33.

⁵Ibid., p. 25.

story are metal-encased wood sash. Two entrances have been cut into original windows. They are located in the second bay from the north and at the southernmost bay of the west elevation. At the northern entrance wood veneer doors are surmounted by horizontal wood infill and transom windows in the top of the arch (photo 6). The southern entrance is a single door with concrete steps and iron handrails; most of the original window is intact above and around the door (photo 7). Wire mesh guards have been installed on the first and second story windows at the east elevation and the second story windows of the west elevation. Exhibits 1 and 2 document the "as found" condition of the elevations. The roof plan is on exhibit 4.

The limestone is generally in good condition. However, there has been spalling and loss of material at the second floor lintels as a result of the window guards. In addition, mortar loss at the window sills necessitates repointing. The terra-cotta cornice is missing material and has open joints. Brickwork is generally in good condition. Some efflorescence is present. Black crust has developed on the granite base. Iron staining is pronounced at the base and sills below corroded window guards. Third floor windows are deteriorated.

c. Interior

Ceilings and walls are plastered on all three floors with the exception of the added mezzanine level which is finished with plywood and gypsum board partitions (photos 8-11). Hexagonal vitreous floor tile and tile wainscots are found throughout except on the first floor where much of the tile has been covered with vinyl (photo 12). Exhibits 3 through 5 depict the "as found" plans and sections.

The overall condition of C-2 is poor, with sections of wall and ceiling plaster largely destroyed, exposing terra-cotta block and reinforced concrete ceilings (photo 13). The vinyl flooring on the mezzanine and first floor survives in a very deteriorated state. The wood platform erected over the ramp at the south end of the first floor has rotted through in several locations and presents an unsafe condition. Exhibits 6 and 7 depict the existing conditions of all floors.

d. Mechanical

The three-story structure was heated by two-pipe sectional cast-iron radiators. The steam risers were fed from a steam main located in the basement level. The system was renewed as part of a 1926 contract let to David Brandt. Radiators probably could be reused after thorough cleaning. None of the existing piping can be retained due to its advanced state of deterioration.

Lighting fixtures consist of opal glass globes on drop cords and metal shades.

Photos 14-15 depict plumbing fixtures, dating from the 1930's, on the first floor and mezzanine.

⁶U.S. Department of the Interior, National Park Service, Denver Service Center. "Historic Structure Report; Ellis Island; Historical Data," by Harlan D. Unrau, 1981, p. 259.

⁷Syska & Hennessy.

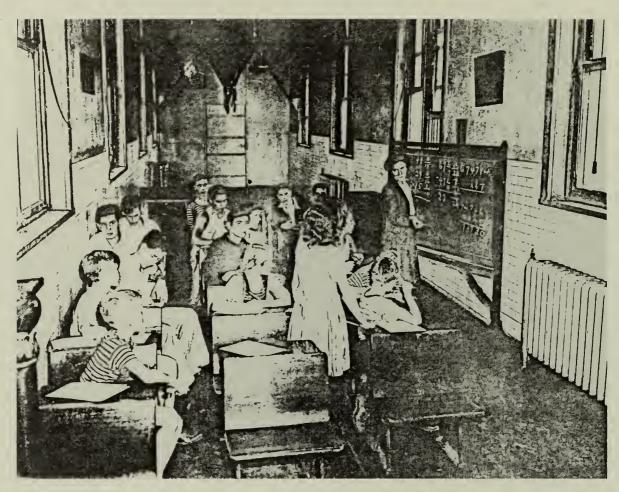
e. Structural⁸

The three-story corridor has a ground floor at grade. The floors and roof are wood-formed reinforced concrete slabs between exterior brick bearing walls.

Cracks have occurred on the underside of the second and third floor slabs as well as on the soffits of the roof due to expansion and contraction of the building. Water penetration has caused rusting of the slab reinforcing and serious corrosion of some of the interior steel lintels over windows and doors (photos 16 and 17).

In addition to repairing the walls and roof, an expansion joint should be installed to remedy the cracking caused by thermal stress.

⁸Based on Robert Silman Associates, P.C., "Supplement," pp. 2, 4.



1. Room 301- Corridor 2, "Young Detainees at Ellis Island- Jennie Pratt, social worker, with children seated in classroom", 6/13/47.



2. East elevation, view southeast.



3. West elevation, north end, view east.



4. West elevation, south end, view southeast.



5. Roof, view south.



6. North entrance, west elevation, view east.



7. South entrance, west elevation, view east.

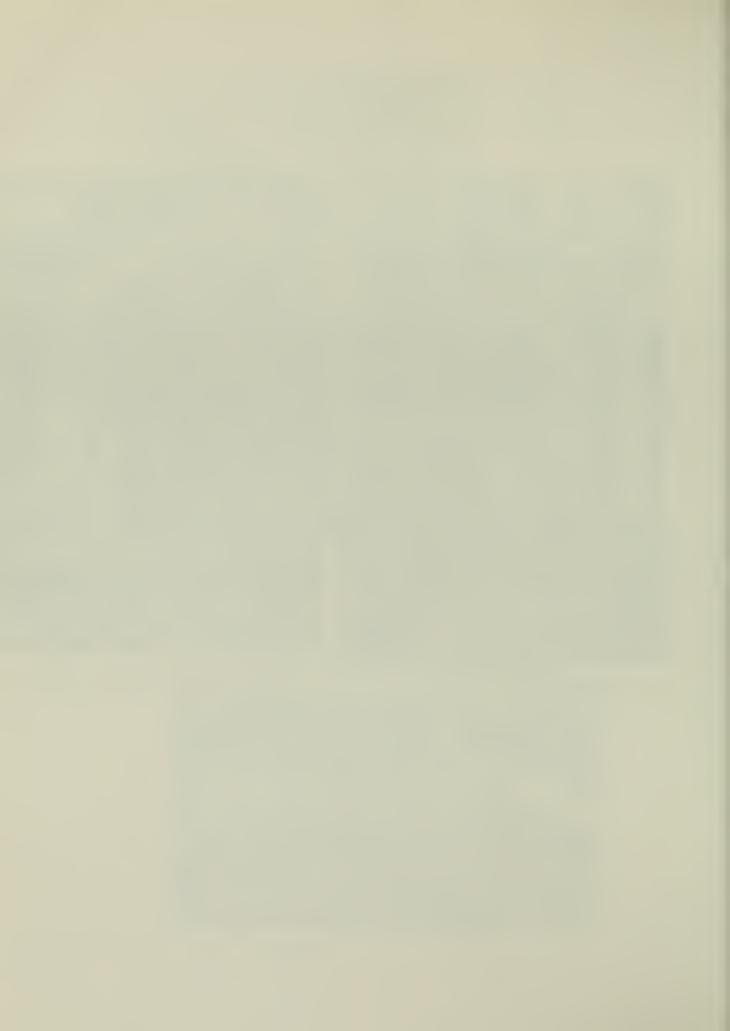


	Exhibit 1	UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE DENVER SERVICE CENTER ARCHITECTS BEYER BLINDER BELLE / ANDERSON NOTTER FINEGOLD 80 FIFTH AVENUE NEW YORK, NY 10114 (212) 741-3960 356 26,005 / 17 of 43 DSC JUL 88
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Exhibit 1

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NATIONAL PARK SERVICE DENVER SERVICE CENTER

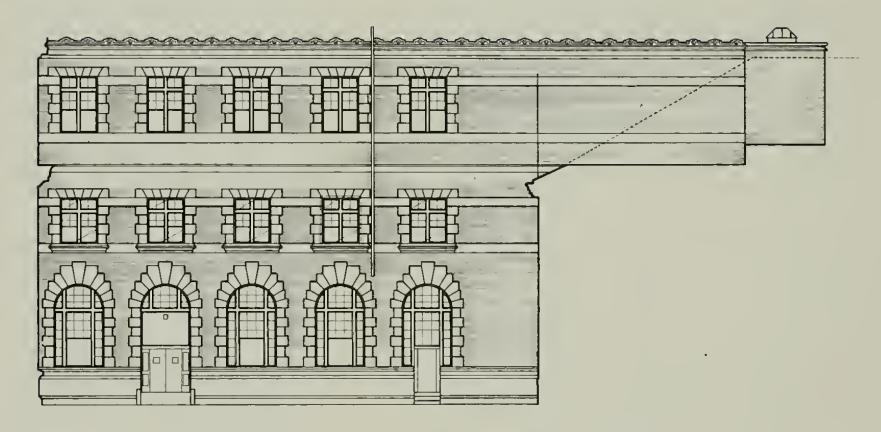
ARCHITECTS

BEYER BLINDER BELLE / ANDERSON NOTTER FINEOOLD 80 FIFTH AVENUE

NEW YORK, NY 10114

(212) 741-2000

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BAGGAGE & DORMITORY

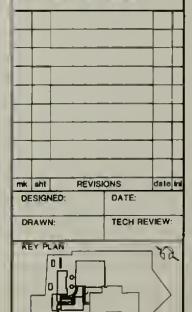
CORRIDOR 2

KITCHEN & LAUNDRY

SURVEY OF STRUCTURES UNIT ONE

ELLIS ISLAND

STATUE OF LIBERTY NATIONAL MONUMENT NEW YORK / NEW JERSEY



CORRIDOR 2 WEST ELEVATION DRAWING NO.

SUB SHEET NO.

UNITED STATES DEPARTMENT Exhibit 2 OF THE INTERIOR NATIONAL PARK SERVICE DENVER SERVICE CENTER ARCHITECTS BEYER BLINDER BELLE / ANDERSON NOTTER FINEGOLD 80 FIFTH AVENUE NEW YORK, NY 10114 (212) 741-3980 356 | 26,005 / 18 of 43 DSC JUL 88 **SURVEY OF STRUCTURES UNIT ONE ELLIS ISLAND** STATUE OF LIBERTY **NATIONAL MONUMENT** NEW YORK / NEW JERSEY date ini mk sht REVISIONS DESIGNED: TECH REVIEW: DRAWN: FR TITLE OF SHEET KITCHEN & LAUNDRY EAST ELEVATION SUB SHEET NO. DRAWING NO. PKG. NO. SHEET SCALE: 1/8" - 1'-0"

Exhibit 2

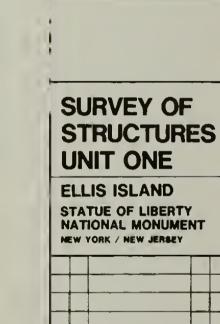
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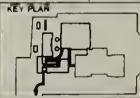
ARCHITECTS

BEYER BLINDER SELLE / ANDERSON NOTTER FINEGOLD 80 FIFTH AVENUE NEW YORK, NY 10114 (919) 741-9560

356 | 26,005 / 18 of 43 DSC JUL 88

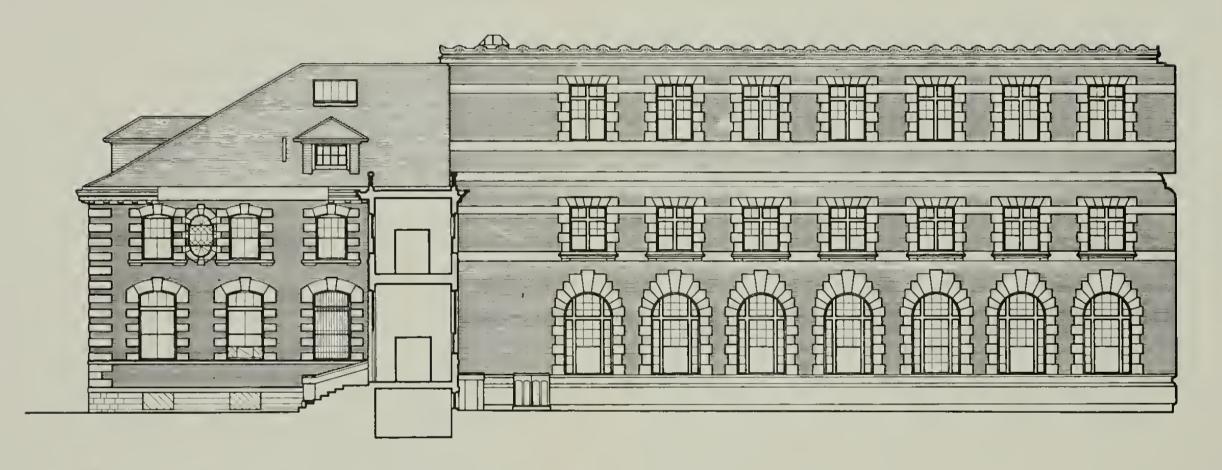


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TITLE OF SHEET KITCHEN & LAUNDRY EAST ELEVATION

SUB SHEET NO. DRAWING NO.



CORRIDOR 2

KITCHEN B LAUNDRY

CORRIDOR I



8. Room 105- looking south- raised platform floor over original ramped floor.



9. Mezzanine level of first floor, C-2.



10. Second floor of C-2 looking north.



11. Third floor of C-2 looking north.

Exhibit 3

UNITED STATES DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE DENVER SERVICE CENTER

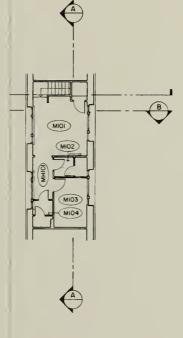
ARCHITECTS

BEYER BLINDER BELLE / ANDERSON NOTTER FINEGOLD BO FIFTH AVENUE NEW YORK, NY 10114

(212) 741-3960

356 26,005 / 19 of 43

DSC JUL 88



MEZZANINE

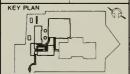


SURVEY OF STRUCTURES UNIT ONE

ELLIS ISLAND

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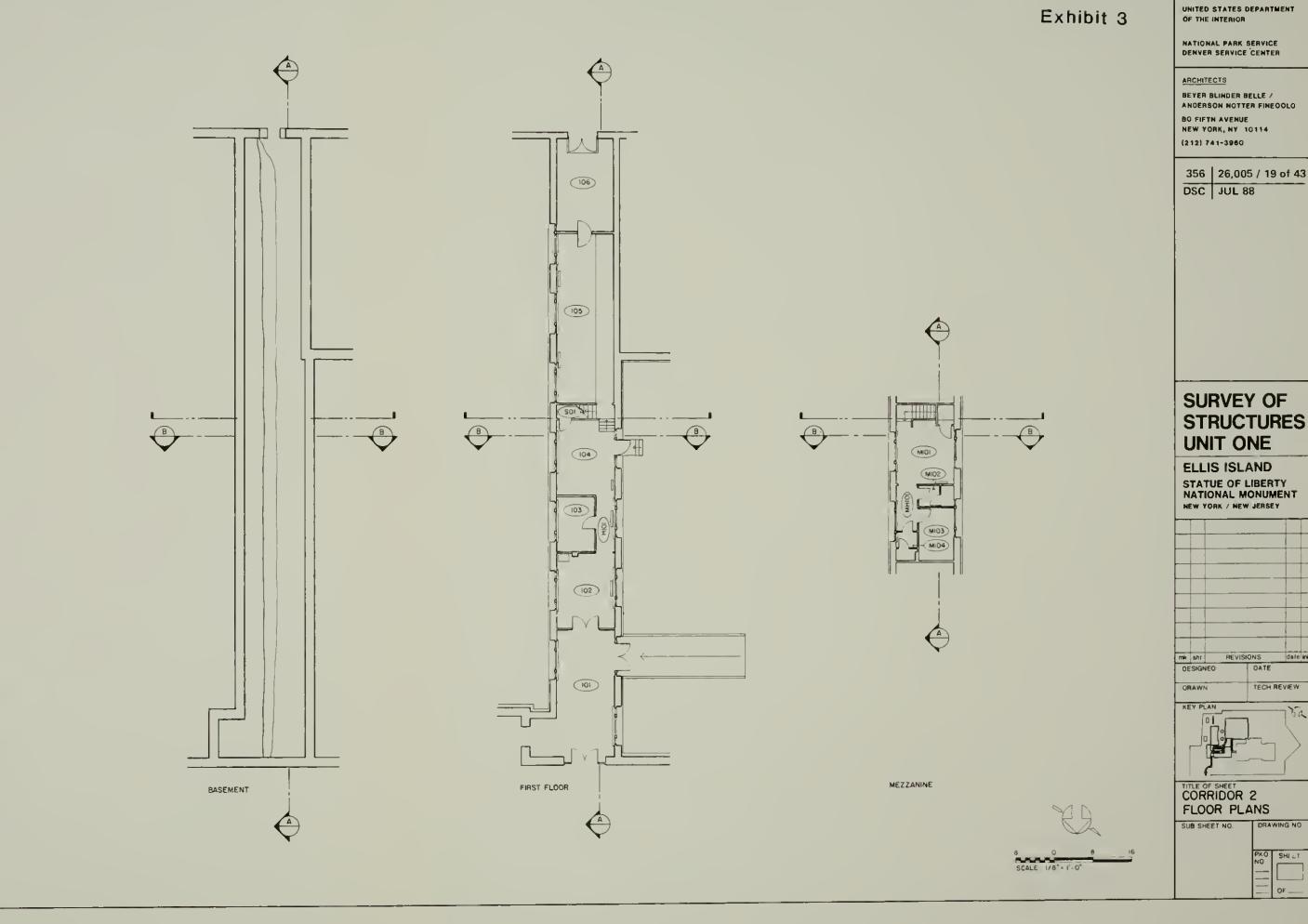
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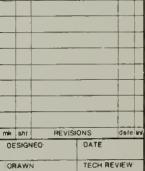


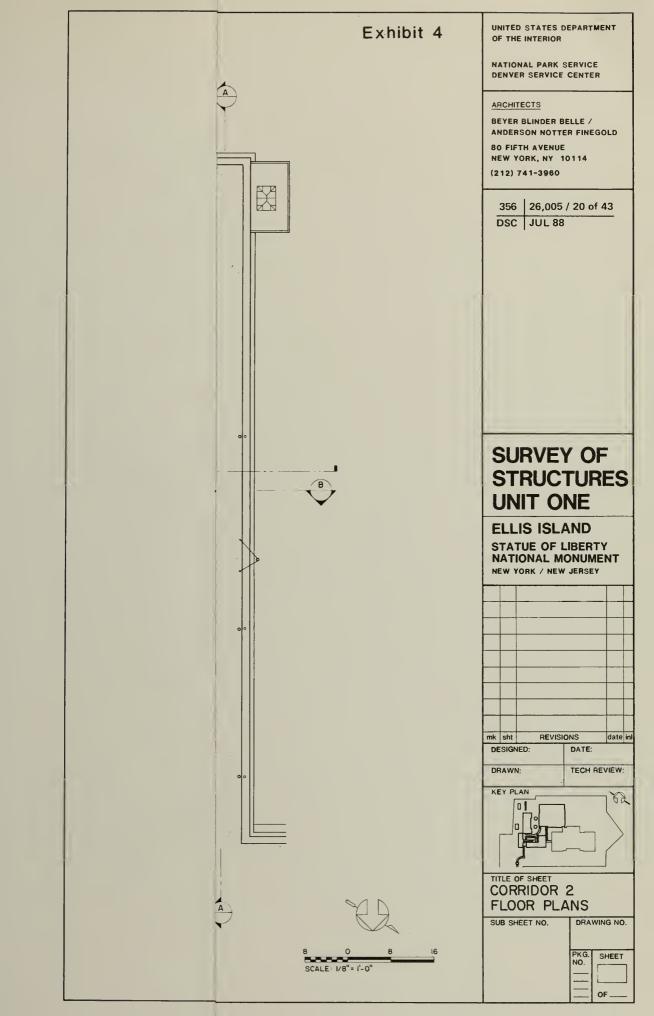
CORRIDOR 2
FLOOR PLANS

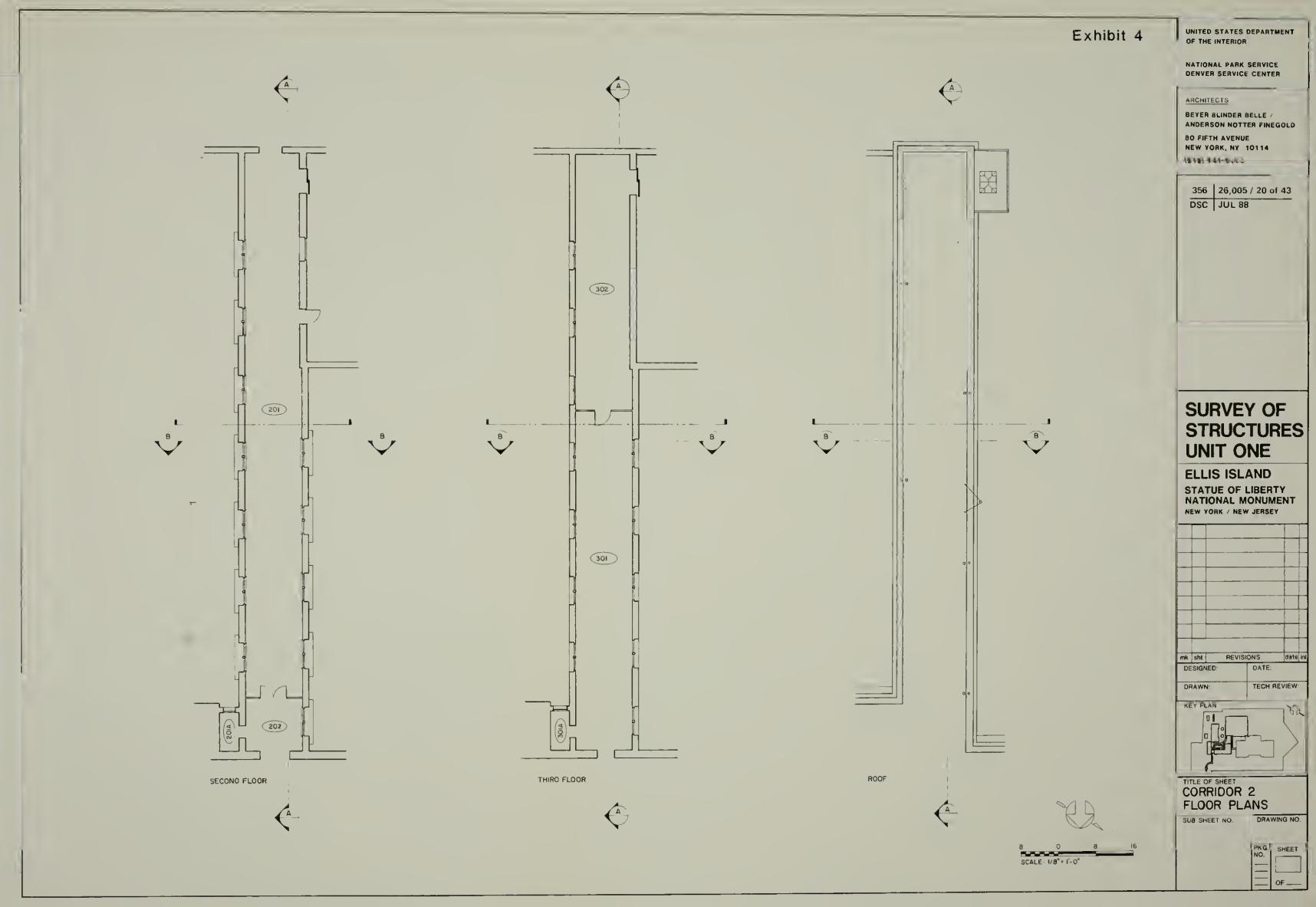
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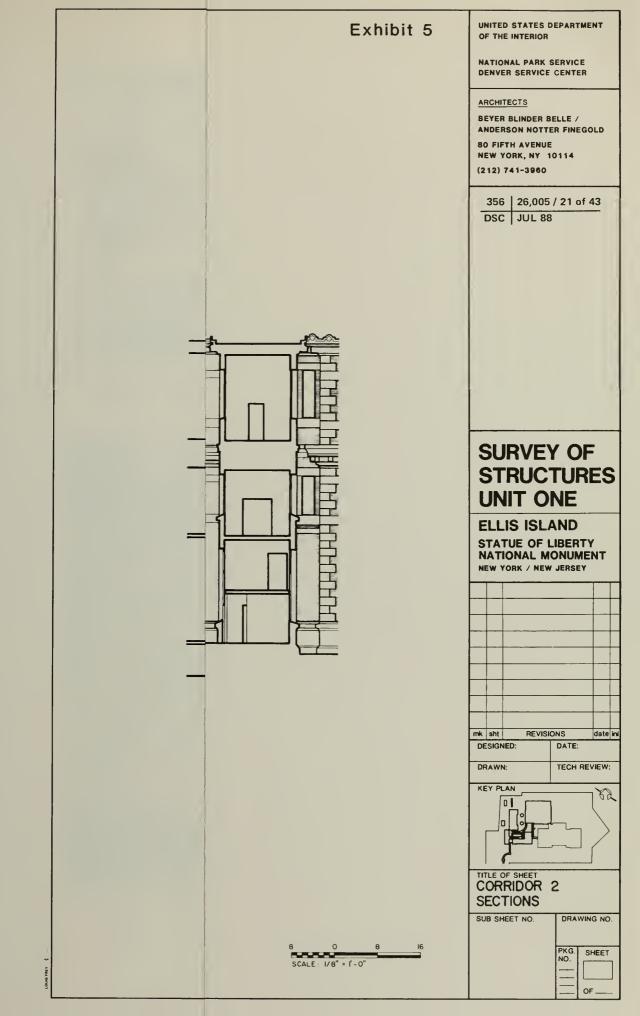


Exhibit 5

UNITED STATES DEPARTMENT
OF THE INTERIOR

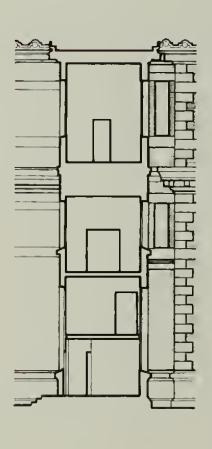
NATIONAL PARK SERVICE DENVER SERVICE CENTER

ARCHITECTS

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SURVEY OF STRUCTURES UNIT ONE

ELLIS ISLAND

STATUE OF LIBERTY NATIONAL MONUMENT NEW YORK / NEW JERSEY

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KEY PLAN

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CORRIDOR 2
SECTIONS

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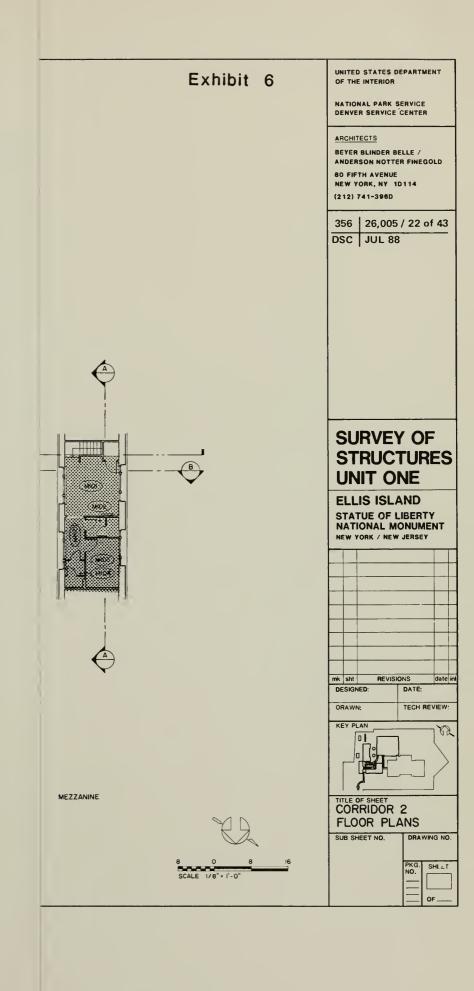


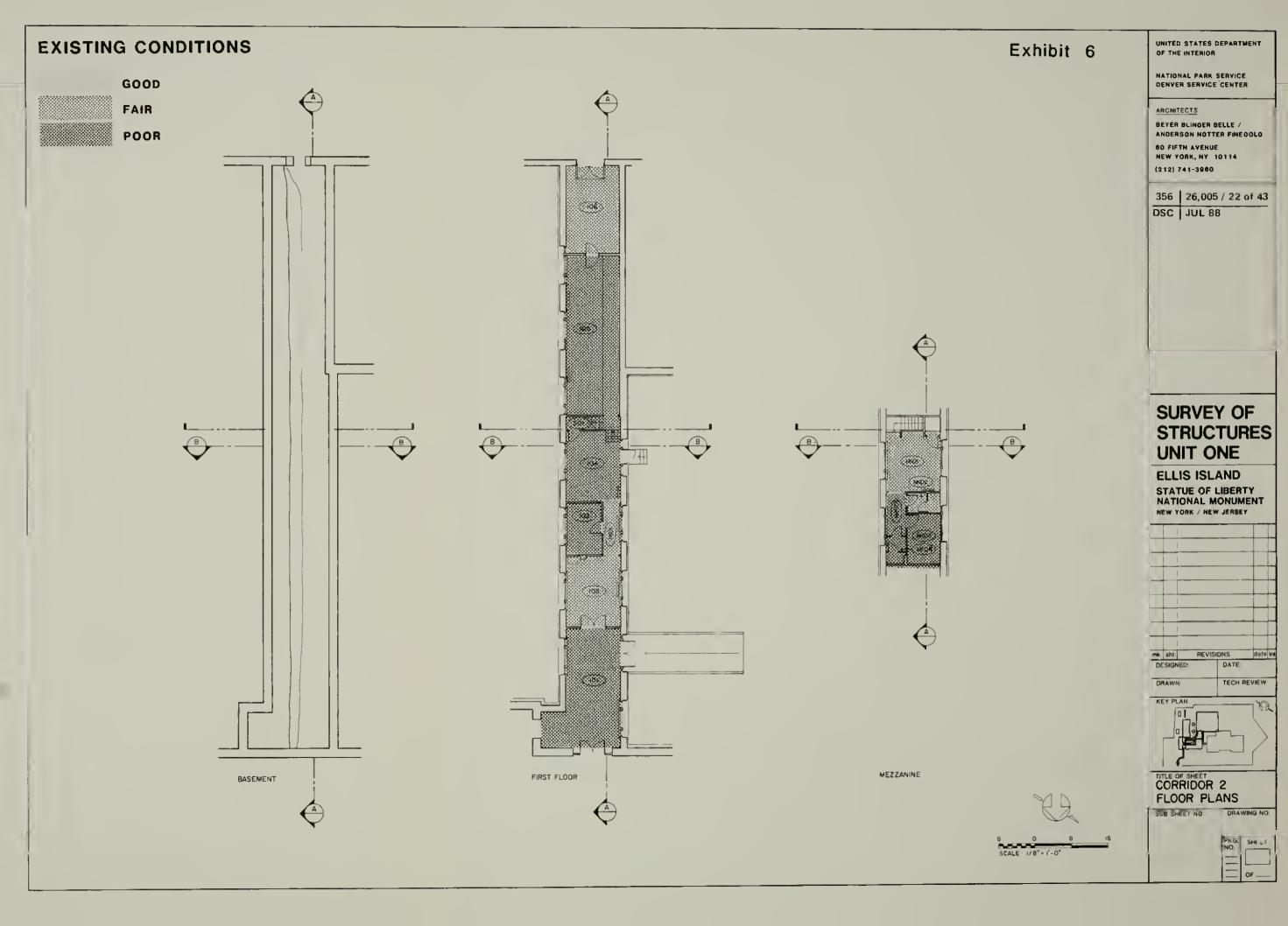
12. Room 104- lowered ceiling forming mezzanine level above. Deteriorated vinyl flooring revealing original hexagonal floor tile.

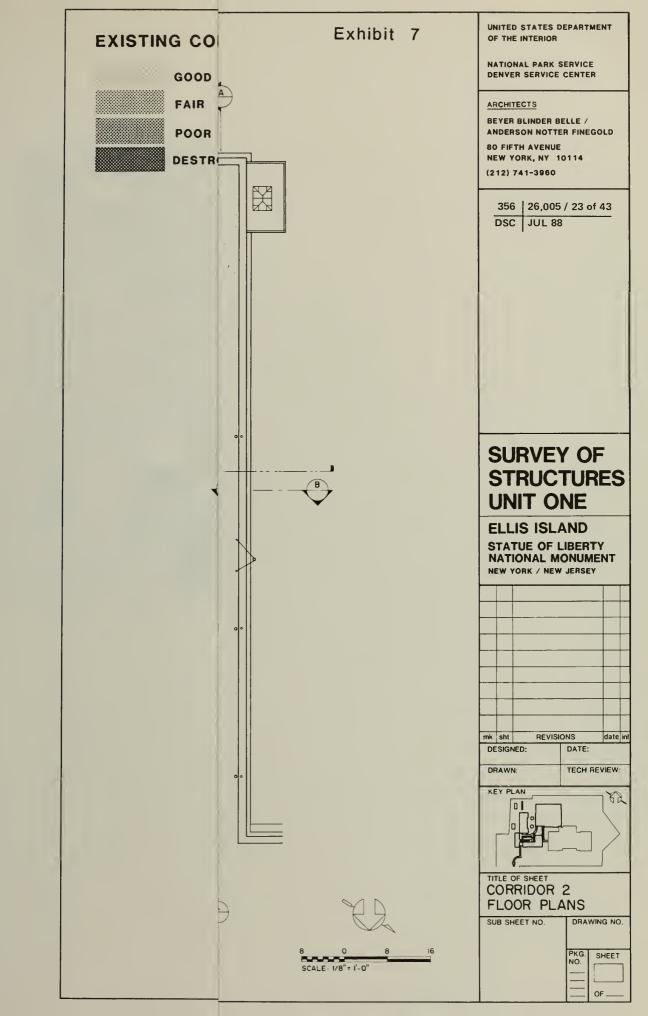


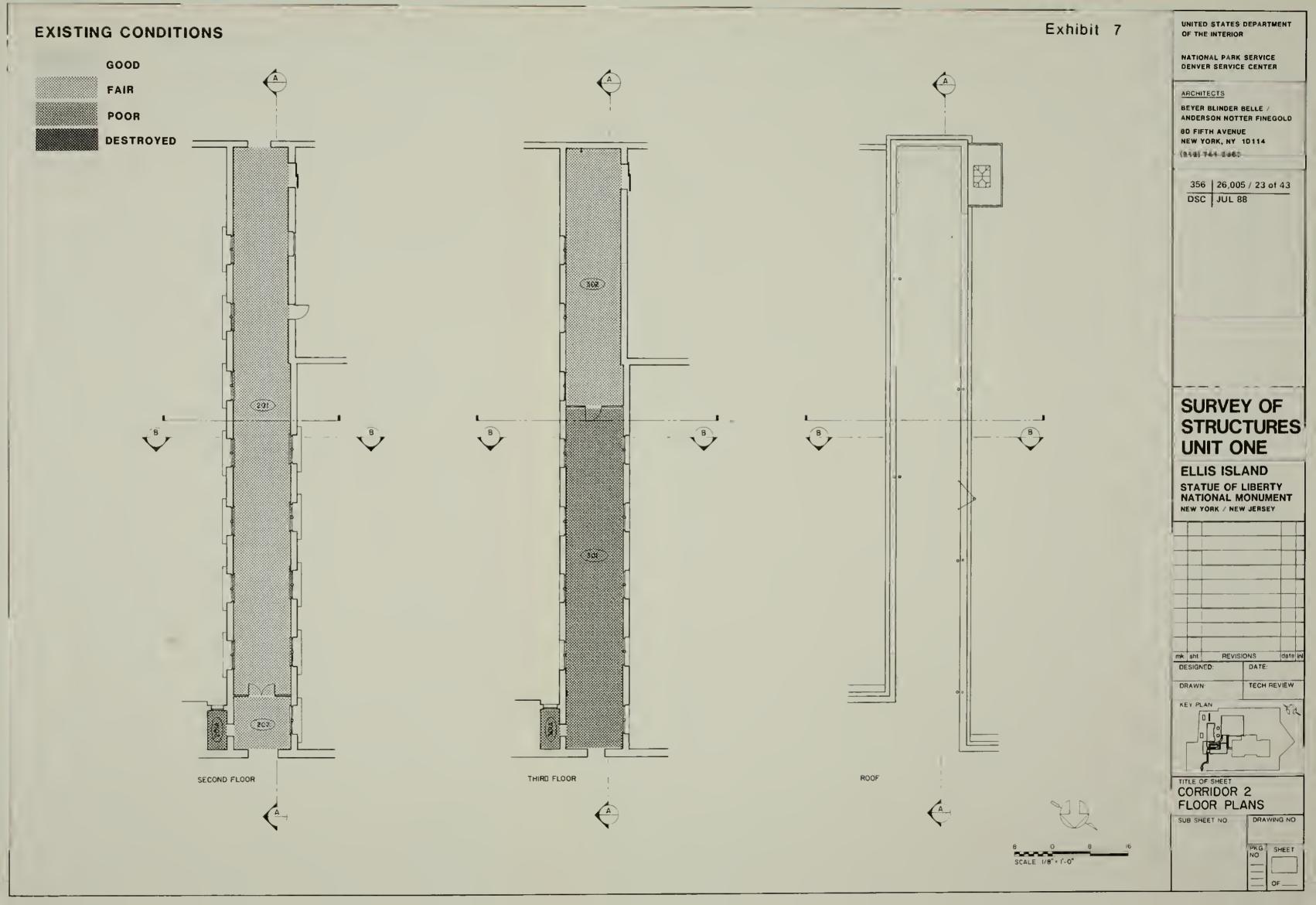
13. Room 101- deterioration of plaster on wall at right and of ceiling parging.













14. Room 103- sink (c. 1930's), lamp with flared cone metal shade.



15. Room 102- square pedestal sink (c. 1940's), RLM-type light fixture with glass globe.



16. Cracking and spalling of stone on either side of keystones on the west facade of C-2.



17. Severe transverse ceiling cracks and vertical wall cracks on second floor of C-2.

4. Covered Way 3 (C-3)

a. Description

This exterior stairway extends across the courtyard from the south wall of room 201 in the baggage and dormitory building to the first floor of the main building (photo 1 and exhibit 1). Constructed in 1924, it provided a path from the main building to the new interview room where friends of the detained immigrants could talk to those detained in the baggage and dormitory building. Two steel I-beams on concrete piers support the steel channel stringers with thirty risers and twenty-seven diamond plate treads. Two concrete landings, in addition to the bottom concrete landing platform, break the stair into three runs. The gable roof with light angle framing and the sides of the stair were originally covered with corrugated copper sheathing. The roof sheathing and flashing is intact with the exception of a section missing in the shed roof over the first floor platform; none of the side sheathing is extant (photo 2).

The stair received natural light at each landing through a six-over-three-light pivotal copper steel sash window on either side and a pair of skylights. The latter originally had 1/4" corrugated wire glass, which has been replaced by corrugated fiberglass (photos 3 and 4). Two windows exist on either side of the first floor landing, an eight-over-four and a six-over-three pivoted metal sash window.

The vestibule terminating the stair in room 201 has wood partitions consisting of tongue-in-groove siding and plywood panels. A door in the west wall has four lights and two wood panels; the east wall door is missing. The northern wall consists of ten lights above wood panels.

An electrical conduit feeding three bulb sockets runs along the central beam.

b. Existing Conditions

All steel elements are corroded and steel windows are severely deteriorated. The only serious corrosion is at the top of the bottom flange of the channel stringers at the intermediate platform. 9 (photo 5). Most of the wire glass panes are cracked or broken and the skylight replacements merely lay over the existing copper roofing. The top right-hand section of the 2-1/4" oak double handrails is missing over the first run.

⁹Robert Silman Associates, P.C., "Ellis Island; Historic Structures Report; Structural Systems," November 1984, p.10.

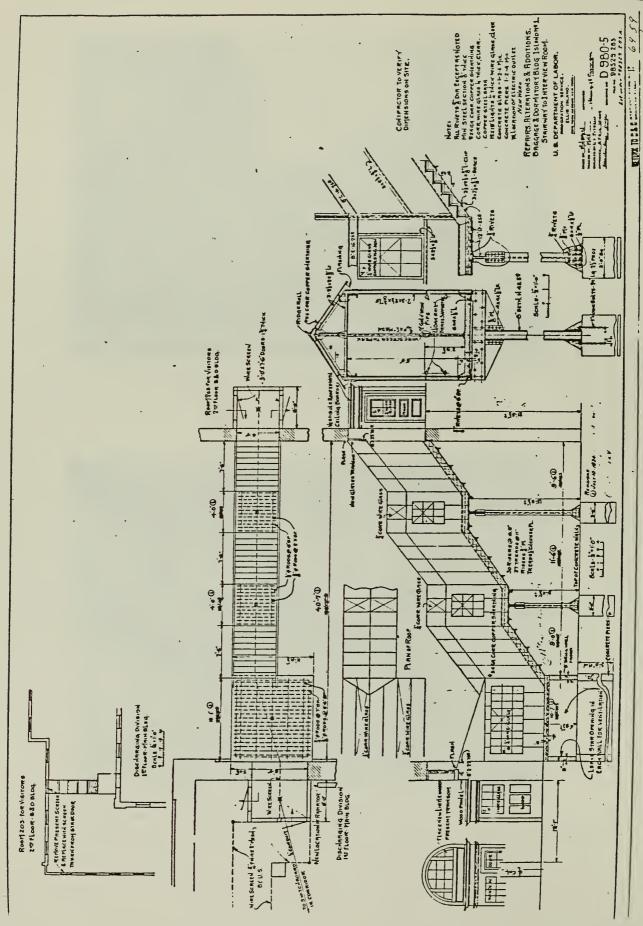


View looking east toward covered stairway (C-3).
 Main building is at right and baggage and
 dormitory building is at left.



2. View of stair looking west toward platform from first floor of main builidng. No side sheathing remains.

356 41,907 / Sheet 7 DSC JUL 88



Covered stair 3- "Addition of Stairway to Interview Room", 1924

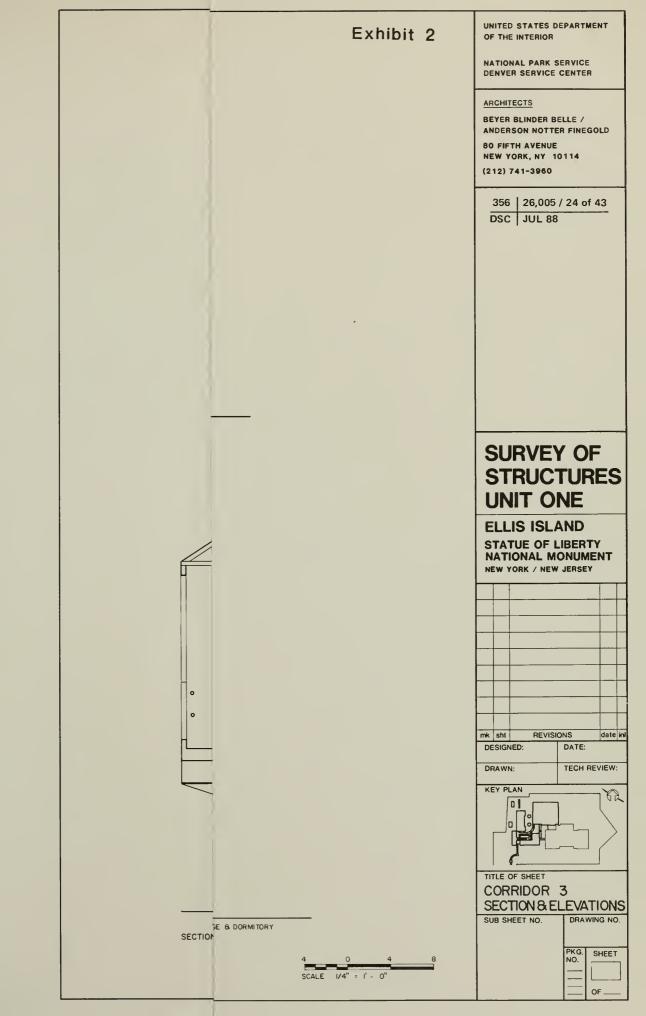


East side of stair- pivoted windows at landings.

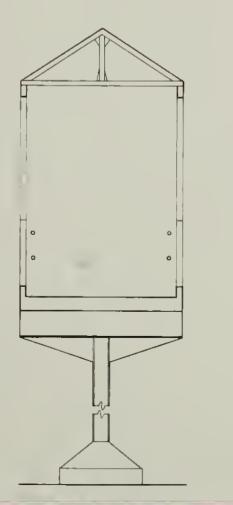


4. View north to baggage and dormitory building vestibule.

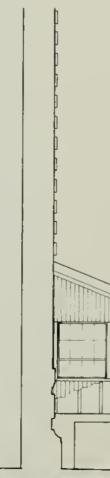




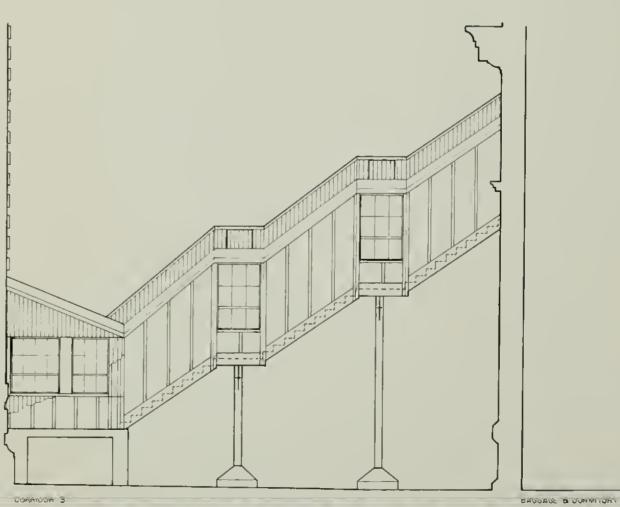
BAGGAGE & DORMITORY CORRIDOR 3 MAIN BUILDING EAST ELEVATION



SECTION A-A



שאווע טעובטוועט WEST ELEVATION



CONTIONA 3

UNITED STATES DEPARTMENT OF THE INTERIOR

> NATIONAL PARK SERVICE DENVER SERVICE CENTER

ARCHITECTS

Exhibit 2

BEYER BLINDER BELLE / ANDERSON NOTTER FINEGOLD

BO FIFTH AVENUE NEW YORK, NY 10114

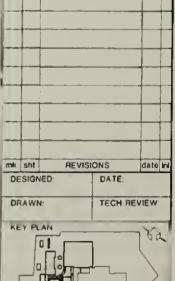
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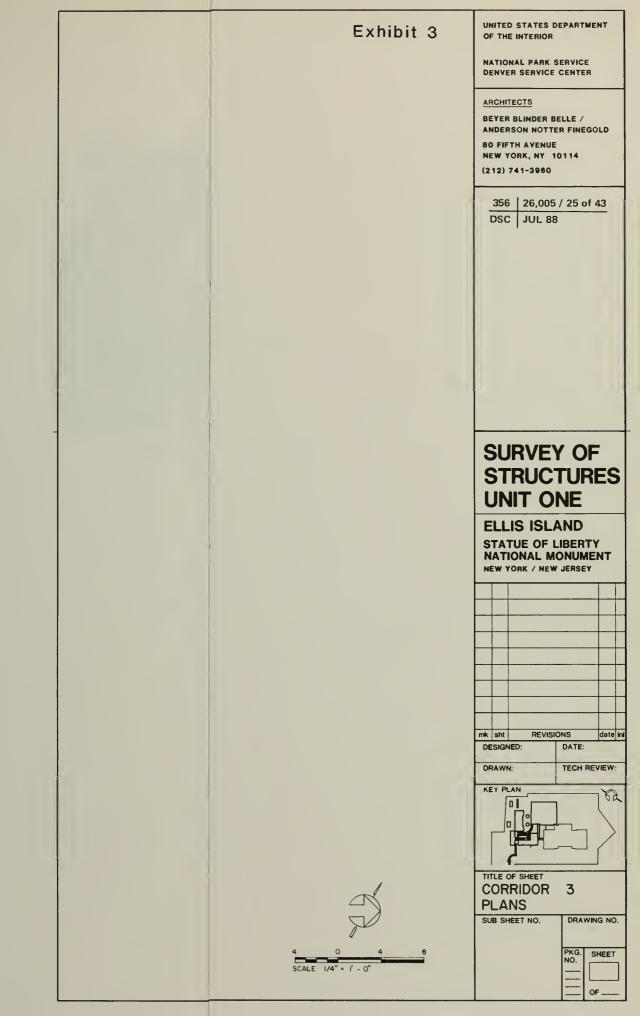
SURVEY OF STRUCTURES **UNIT ONE**

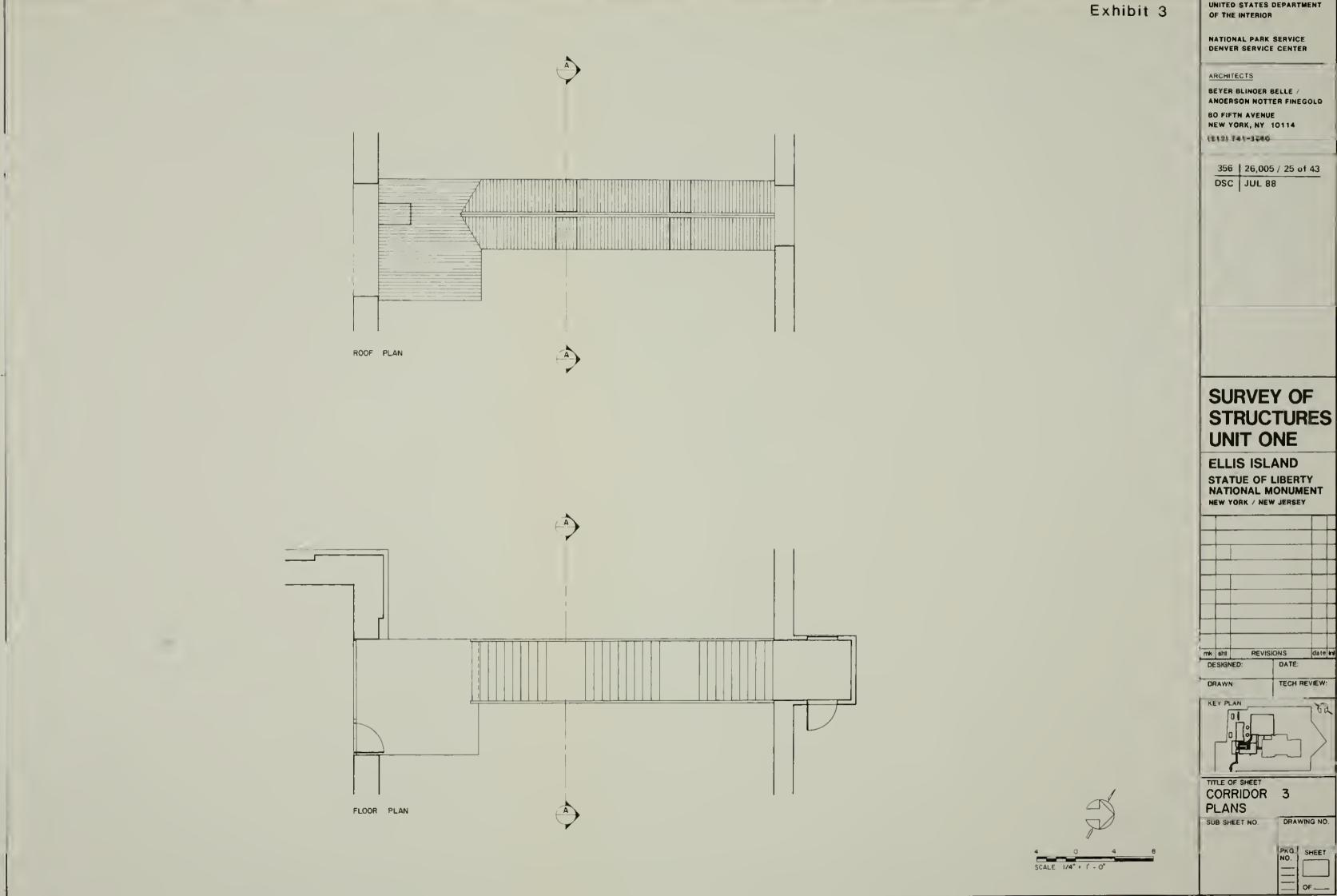
ELLIS ISLAND STATUE OF LIBERTY NATIONAL MONUMENT NEW YORK / NEW JERSEY



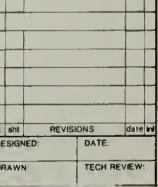
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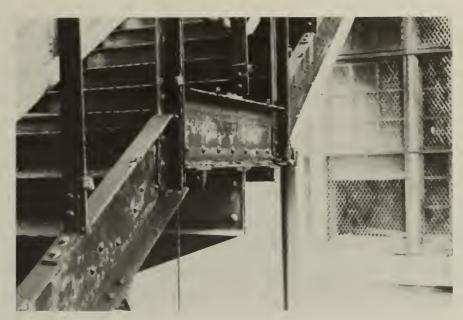
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UNITED STATES DEPARTMENT





5. Corrosion on top of bottom flange of channel stringers at intermediate platform.

5. Covered Way 4 (C-4)

a. <u>Description</u>

Covered way 4, forming an arc from the baggage and dormitory building to covered way 5 (C-5), was finished in 1909. At the north end it joins a one-and-one-half-story arched entrance at the southwest corner of the baggage and dormitory building. At the west the passage connects with the northern end of covered way 5, near the southern entrance to the powerhouse (photos 1-3). Though originally planned as an enclosed passage with arched windows (like covered way 5), it was built as a brick arcade in stretcher bond with a gabled tile roof and a concrete floor (photos 4-5). A section of arches on the west side was later filled in with brick, slightly recessed from the exterior surface (photo 6). Exhibits 1 and 2 depict the "as found" condition of covered way 4.

The gable roof framing is wood plank spanning from a center steel ridge beam to the exterior walls. 10 The plywood-formed concrete ceiling slab was installed in 1934 (exhibit 3). The overhead pipe space above this ceiling contained electrical conduit supplying power to the baggage and dormitory building from the powerhouse. This pipe space is ventilated by flat stamped metal grilles open to the exterior. No piping presently exists in the structure. 11

¹⁰Robert Silman Associates, P.C., "Supplement," p. 4.

¹¹Syska & Hennessy.

b. Existing Conditions 12

A crack in the soffit of the brick arch is located at the western end of the passage where it joins C-5. The ceiling slab has many transverse cracks with evidence of some water leakage (photo 7). Near the entry to the baggage and dormitory building there is severe cracking of the brick walls at both east and west sides (photo 8). Both types of cracking are caused by temperature related movement. The brick infill of one of the west arches has a wide vertical crack where the wall is bulging inward. The cracking of the support walls at both ends of the arcade are acting as expansion joints. Expansion joint material should be placed in these cracks to forestall water intrusion. Plants are growing in the gutters.

¹²Based on Robert Silman Associates, P.C., "Historic Structures Report," p. 14.



1. C-4- looking west from third floor of C-2.



2. East wall of C-4.



3. C-4- view north into entry to baggage and dormitory building.



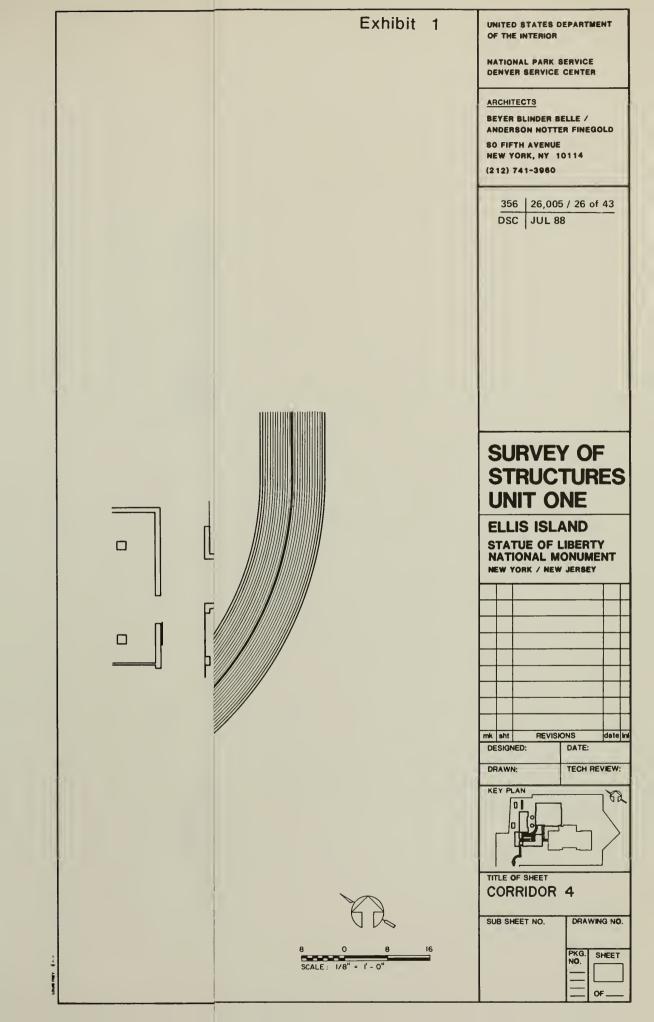
4. C-4- view south from baggage and dormitory building entry.

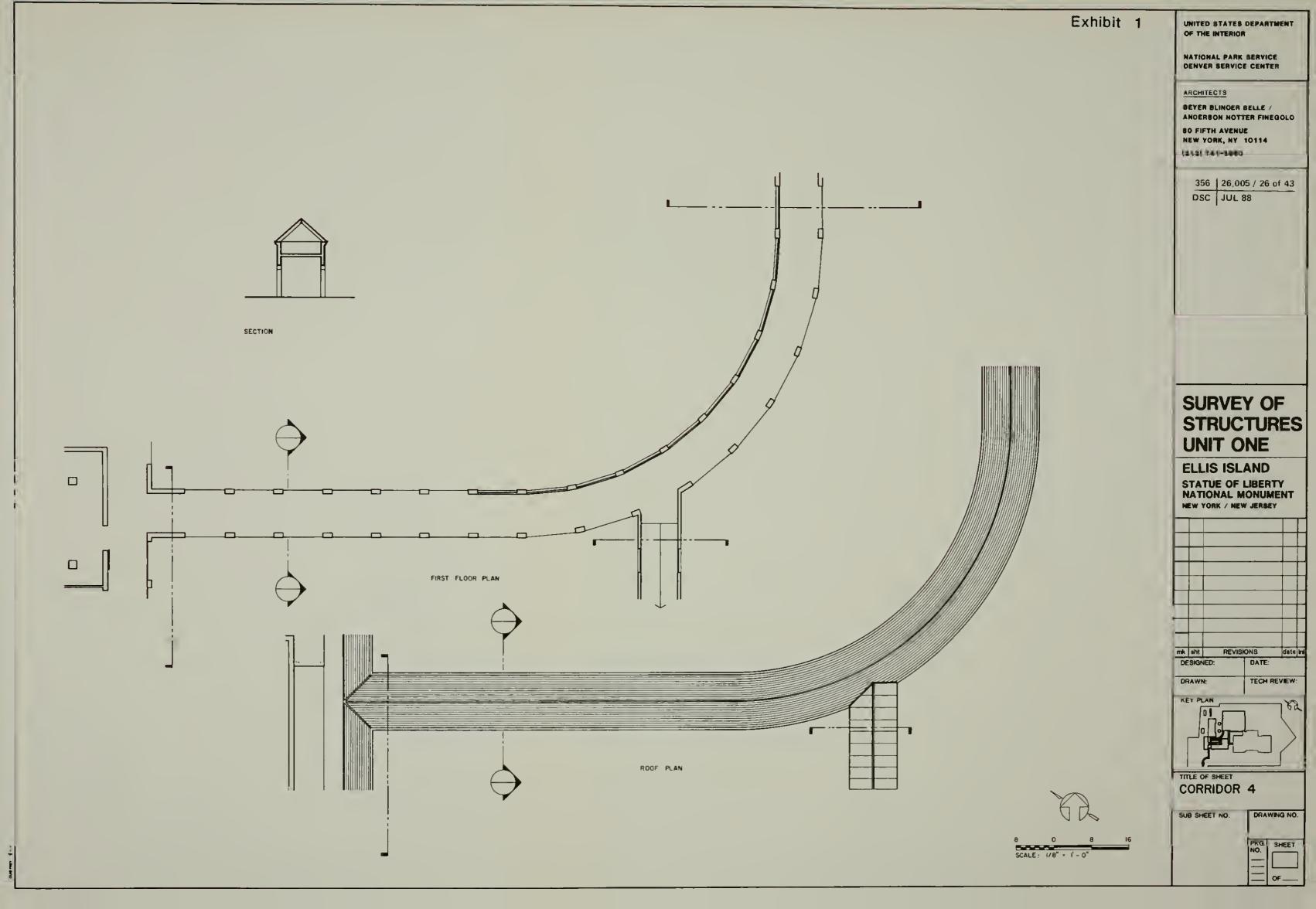


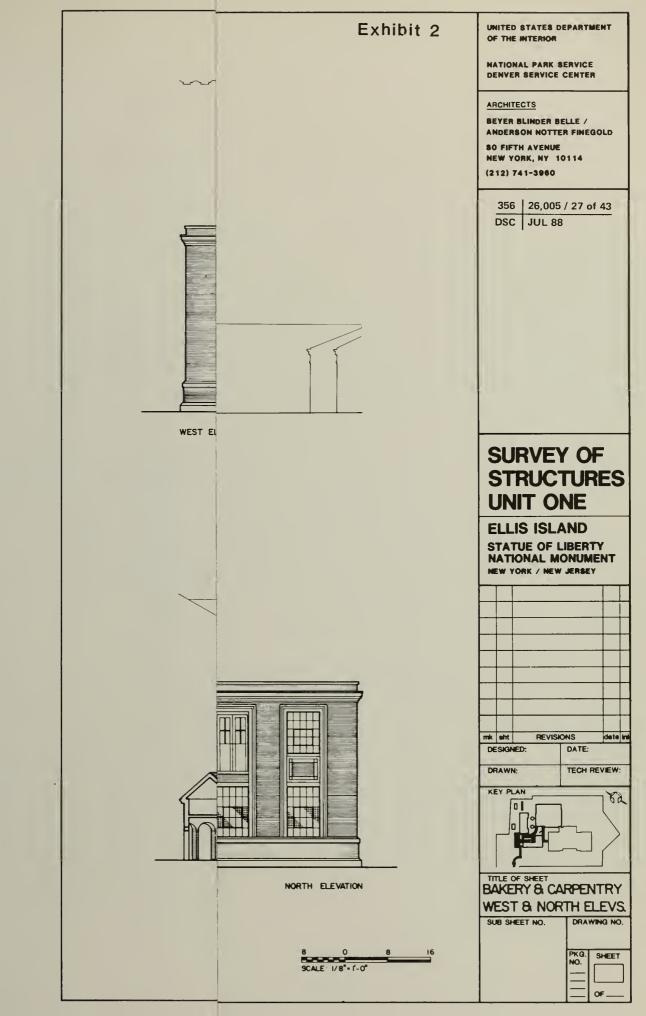
5. C-4- view east toward curving portion.

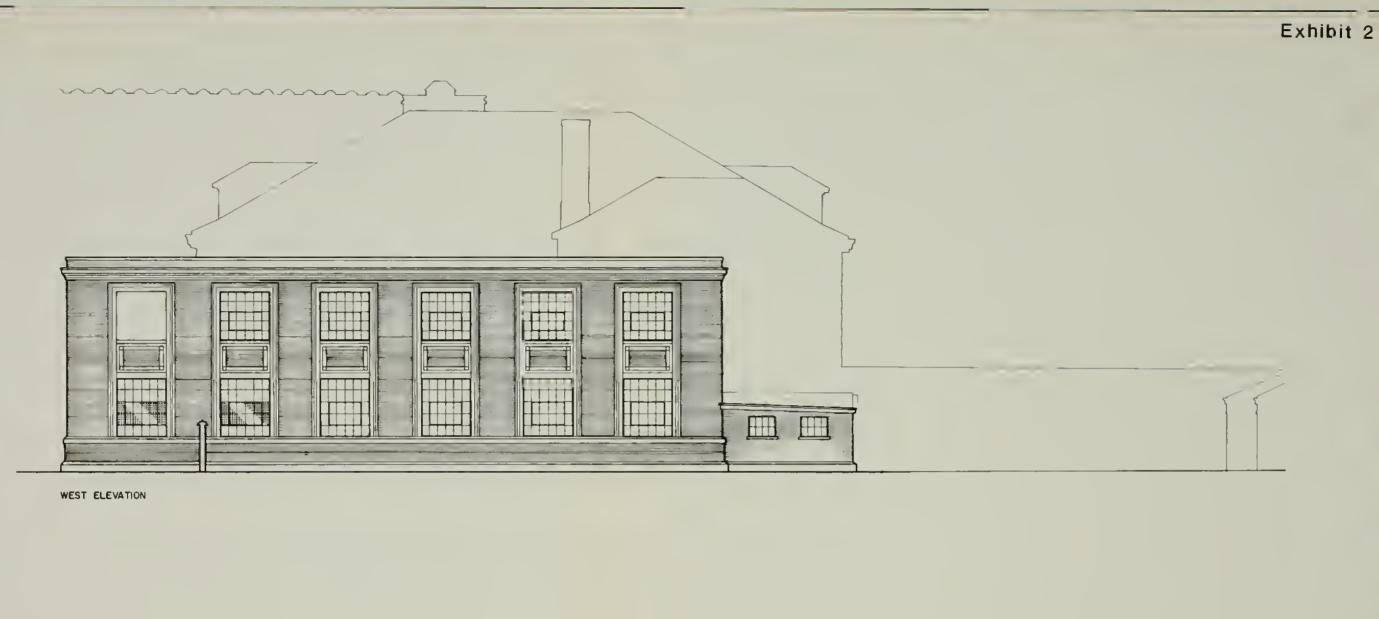


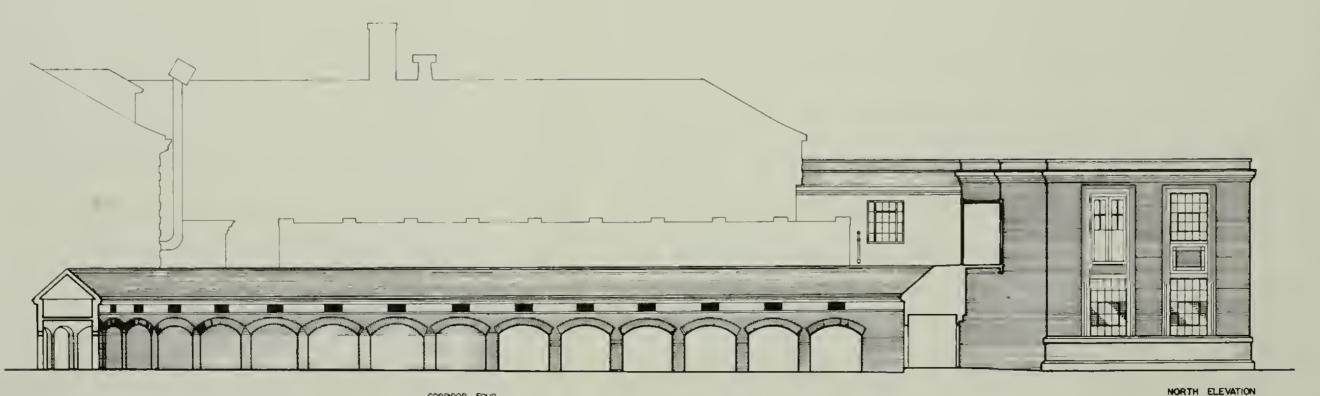
6. C-4- west interior wall with brick filled-in arches.











CORRIDOR FOUR

UNITED STATES DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE DENVER SERVICE CENTER

ARCHITECTS

BEYER BLINDER BELLE / ANDERSON HOTTER FINEOOLD 80 FIFTH AVENUE

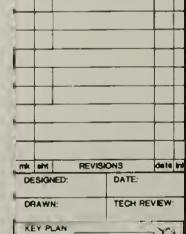
NEW YORK, NY 10114 (144) 141-1410

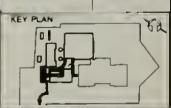
356 | 26,005 / 27 of 43 DSC JUL 88

SURVEY OF STRUCTURES UNIT ONE

ELLIS ISLAND

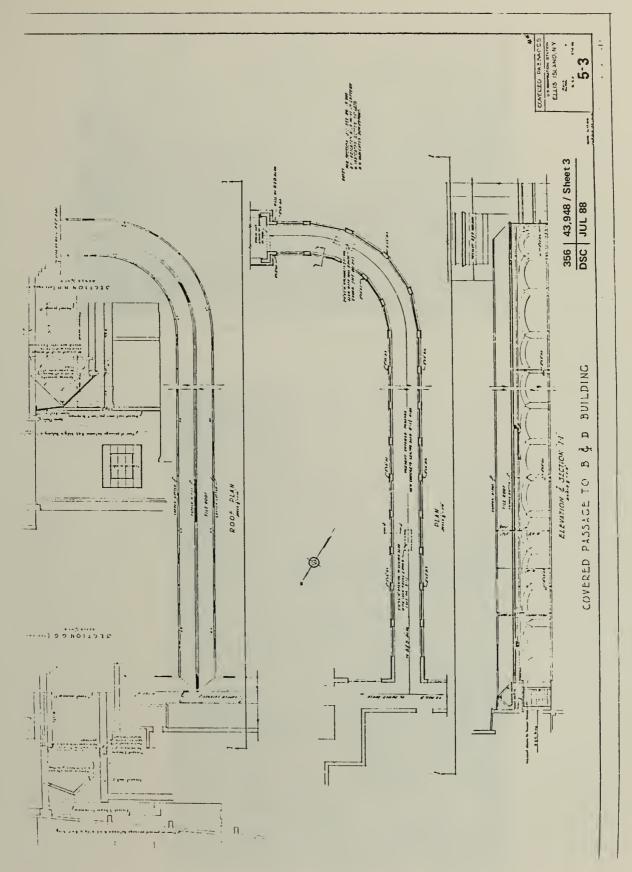
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TITLE OF SHEET
BAKERY & CARPENTRY WEST & NORTH ELEVS.

SUB SHEET NO.



Covered way 4- new concrete ceiling slab, 1934.



7. C-4- transverse cracks in the ceiling with evidence of water leakage.



8. C-4- separation at mortar joints on east wall near arched pavilion to baggage and dormitory building.

6. Covered Way 5 (C-5)

a. Historical Development

This covered way was designed by Boring & Tilton. Extending from the powerhouse to the ferry building, it was constructed concurrently with the powerhouse in 1901. Steam and electric pipes and electric wires were conveyed from the powerhouse to the other buildings on the island under the roof of this covered way. Photos 1 and 2 show the east facade of the passage circa 1910. Adjacent to the covered way on the west was the wooden waiting shed for immigrants' friends. It was separated from the covered way by diamond wire grilles and windows in the brick arches (exhibit 1). The northernmost pavilion, originally located west of the kitchen and laundry building, was demolished when the bakery and carpentry building was built in 1914-15. The waiting shed was removed in 1934. The following year courses of brick were added to the top of the original walls, making the structure taller. The western arches were in, becoming a party wall between the existing covered passage and a new covered passage. The latter passage was originally planned to provide access to a new sun porch to be built north of the immigrant's building (exhibits 2 and 3). This porch was never built and the new passage was divided into five rooms. The new passage was built to match the old with wood sash and panels in brick New ceiling slabs were installed in both passages and a new concrete floor was poured in the southern pavilion.

The new passage included an enclosed concrete stairway with brick walls built along the east wall of the bakery and carpentry shop (photo 3). It led to the second floor of the kitchen and laundry building. The top landing of the stair has been bricked in.

b. Exterior

1. Description

Covered way 5 connects the powerhouse and the ferry building. It runs north-south with a curved section linking two pavilions at the south (photos 4-7). The pavilions are constructed of red brick laid in Flemish bond. They have stilted arch openings in each exposed elevation that were originally doorways. The openings on the northeast pavilion have been filled in with horizontal wood, brick, stucco tympanums, and windows. In addition, windows have been cut out at the corner of this pavilion (photo 8). The arches on the other pavilion are open and have bluestone corner guards (photo 9).

Both elevations of the covered way are constructed of red brick with piers forming an arcade of segmental arches. The east elevation is common bond. Decorative elements include rowlock arches and a single header course six rows below the eaves. Wood sash windows are grouped in four-light-triplets in each arch. On the east elevation the area below the windows has been filled in with brick and a concrete base while at the west elevation the windows rest on a frame base with three wood panels.

The gable roofs of the passage and the hipped roofs of the pavilions are clad in terra-cotta tiles.

The gable-roofed projection north of the pavilion on the west elevation is all that was constructed of a planned passage to sun porches that were never built. It is red brick laid in common bond with a concrete lintel, stucco in the gable end, and a four light window (photo 15). Exhibits 4 and 5 depict the elevations and roof plan of covered way 5.

2. Existing Conditions

The east elevation of covered way 5 is in fair condition while the west elevation is in extremely poor condition. The brick exhibits loss of mortar and surface spalling on both elevations. More substantive spalling has occurred at the corners of the piers and at the pavilions. Brick is missing at the corner of the window sill on the northeast pavilion (photo 11). The brick at the opening adjacent to the powerhouse is crumbling and a temporary wood support has been installed (photo 12). An exposed corroded beam has caused spalling at the concrete lintel on the gabled projection (photo 13). Efflorescence is pronounced on the east pavilion and on the straight section of the east elevation.

Windows on most of the east pavilion are generally intact. However a few are splitting or missing glazing. In contrast, the windows at the west elevation are in extremely deteriorated condition. Two arches at the north end, near the powerhouse, have been filled with horizontal wood on the interior and vertical wood supports and tar paper on the exterior (photo 14). Frames and muntins are rotted, warped, and separating, and are entirely missing in some locations. Much of the glazing is broken or missing. The wood panels are rotted and many are no longer extant. One arch on the west elevation is blocked off with wood and another is entirely open (photos 15 and 16).

The roof tiles are generally in good condition although some are cracked or missing. Gutters are clogged with leaves. Downspouts are entirely missing at the west elevation (photo 17); some are missing on the east elevation, while others have been replaced with PVC pipes.

Flashing is torn at the juncture of the gabled projection and the pavilion on the west elevation (photo 18).

c. <u>Interior</u>

The interior of covered way 5 is divided lengthwise into two sections: a continuous passageway on the east side of a solid brick wall continues along the east side of the bakery and carpentry building and into the powerhouse; and a series of rooms on the west side of the wall, south of the bakery and carpentry building. Floors and ceilings are concrete slab and the walls are painted brick. Exhibit 6 depicts the "as found" plan of covered way 5. Exhibit 7 illustrates a section of C-5 and the northern portion of its east elevation.

The interior condition of this corridor is generally good on the eastern side of the corridor (photos 19 and 20). The concrete flooring has only one cross crack. The eastern wall exhibits some paint flaking and minimal efflorescence. The rooms of the western half of the corridor are generally in good condition except for the arched wooden windows and bulkhead panels (photo 21). Concrete ceiling and floor are good and plaster walls exhibit only peeling paint. Exhibit 8 depicts the existing conditions.

d. Mechanical 13

The overhead piping space of covered way 5 contains much of the conduits and piping which served the entire island, including high-pressure and low-pressure steam lines and related traps, drips and return lines. The steel trusses framing the roof were used to both support and anchor the steam lines.

Reuse of existing valves and piping is not recommended due to its advanced state of deterioration.

Sectional radiators are found in the western rooms and in room 102A. Corridor lighting consists of ceiling-mounted lamps, some with wire guards. RLM-type metal shades were used in the western rooms (photos 22-23).

e. Structural

The gable roof framing is wood plank spanning from a center steel ridge beam to the exterior walls. Transverse cracks, caused by temperature related movement, appear in the ceiling slab (photo 24), but do not require repairs. 14 The north end of the east wall adjacent to the powerhouse is structurally unsound. A temporary wood support has been installed, but rebuilding is required.

¹³Syska & Hennessy.

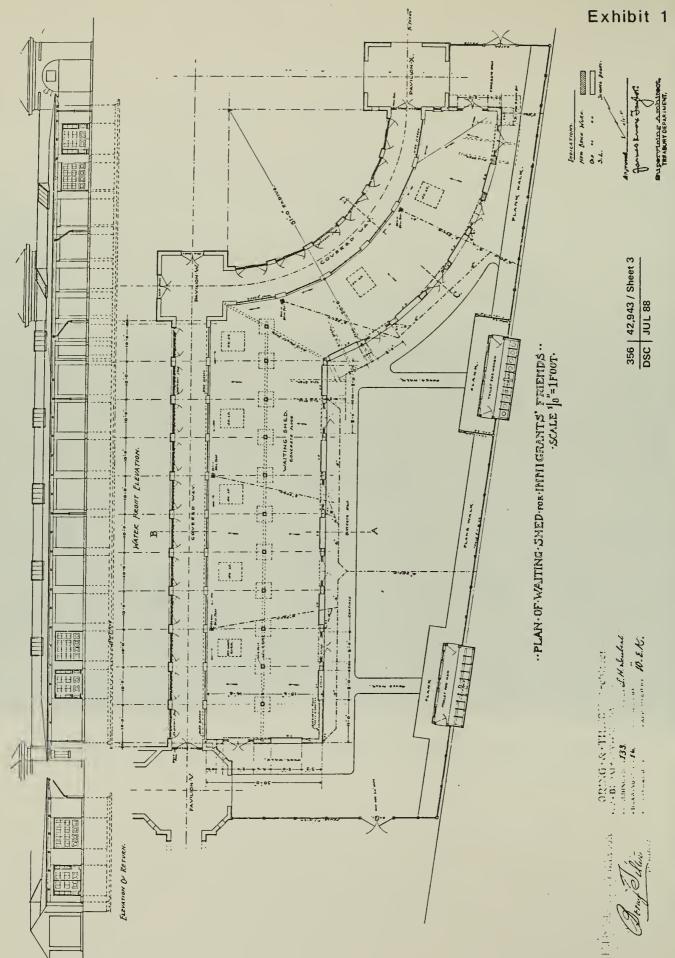
¹⁴ Robert Silman Associates, P.C., "Historic Structures Report," p. 10.



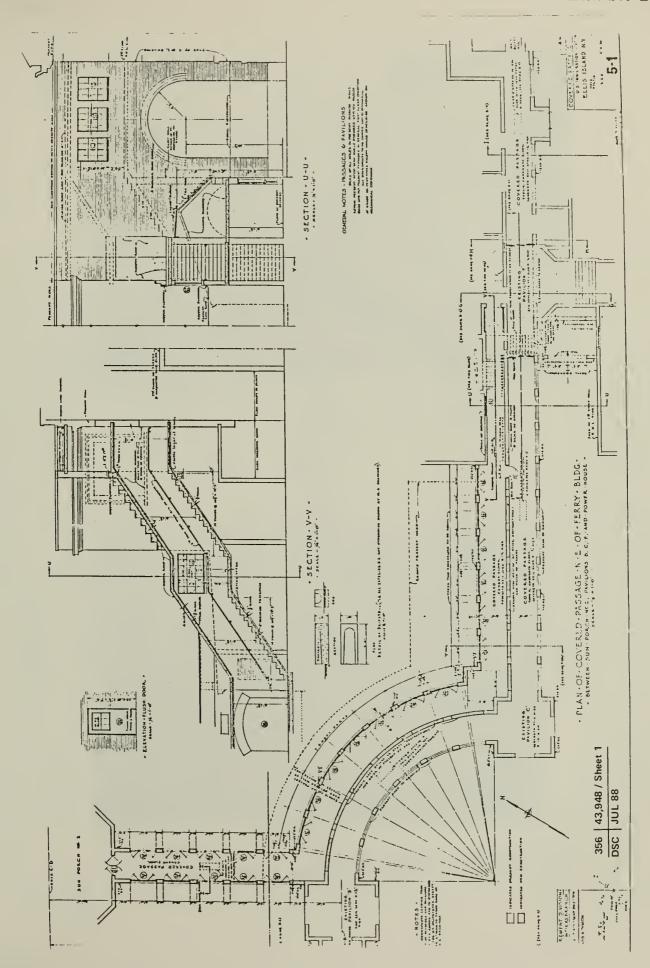
1. Covered way #5. William Williams Collection No.9, 1909, Edwin Levick, photographer. (Kitchen and laundry building at far right.)



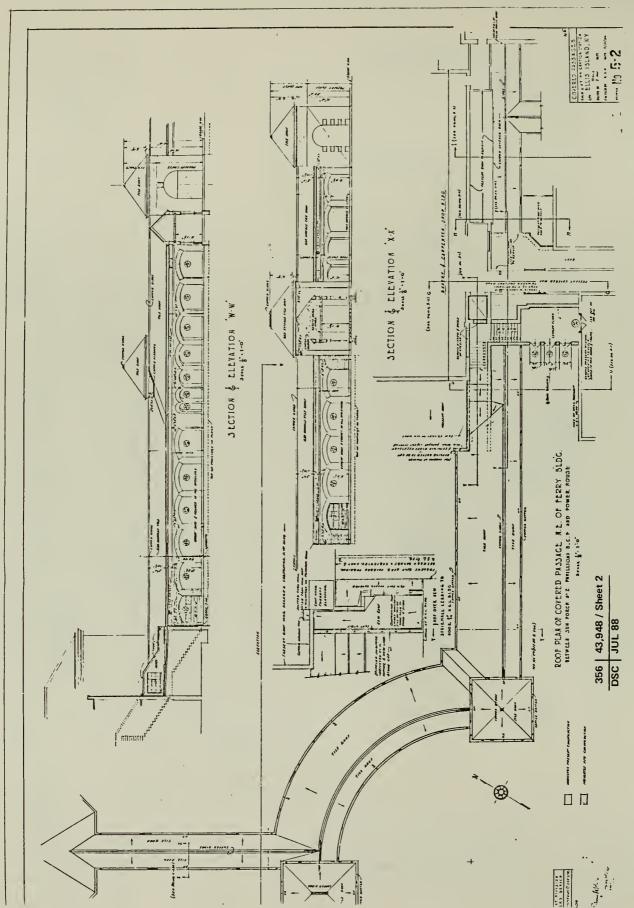
2. Covered way #5. William Williams Collection No. 2, 1909-1912, Edwin Levick, photographer.



Plan for covered way 5 with wooden waiting shed, 1901.



3



Covered way 5- Roof, sections and elevations for new addition to the west side and a new stair, 1934.



3. C-5 at left; south wall of enclosed stairway to kitchen and laundry at right; view north.



4. East elevation, view west.



5. North section of east elevation, view west.



6. West elevation, view east.



7. North section of west elevation, view east.



8. Northeast pavilion, view north.



9. Southwest pavilion, view west.



10. Gabled projection north of pavilion, west elevation., view northeast.

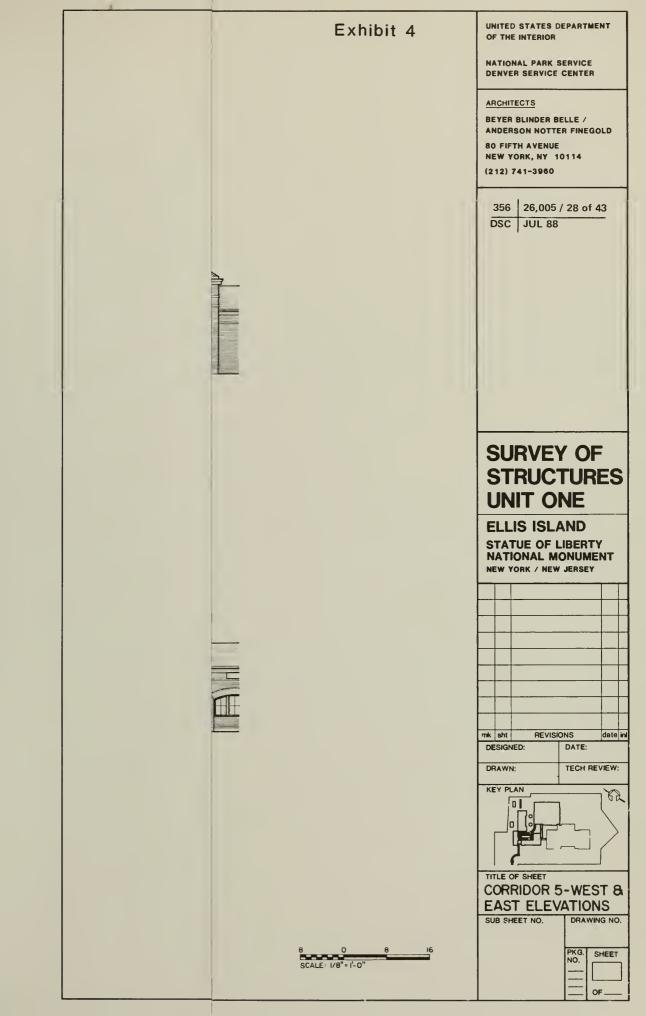


Exhibit 4

UNITED STATES DEPARTMENT OF THE INTERIOR

> NATIONAL PARK SERVICE DENVER SERVICE CENTER

> > ARCHITECTS

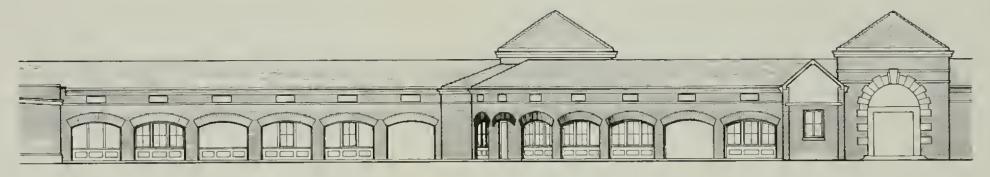
BEYER BLINGER BELLE / ANGERSON NOTTER FINEGOLD

80 FIFTH AVENUE NEW YORK, NY 10114

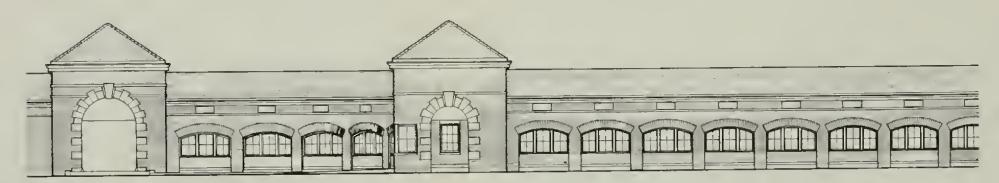
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WEST ELEVATION



EAST ELEVATION

SURVEY OF STRUCTURES UNIT ONE

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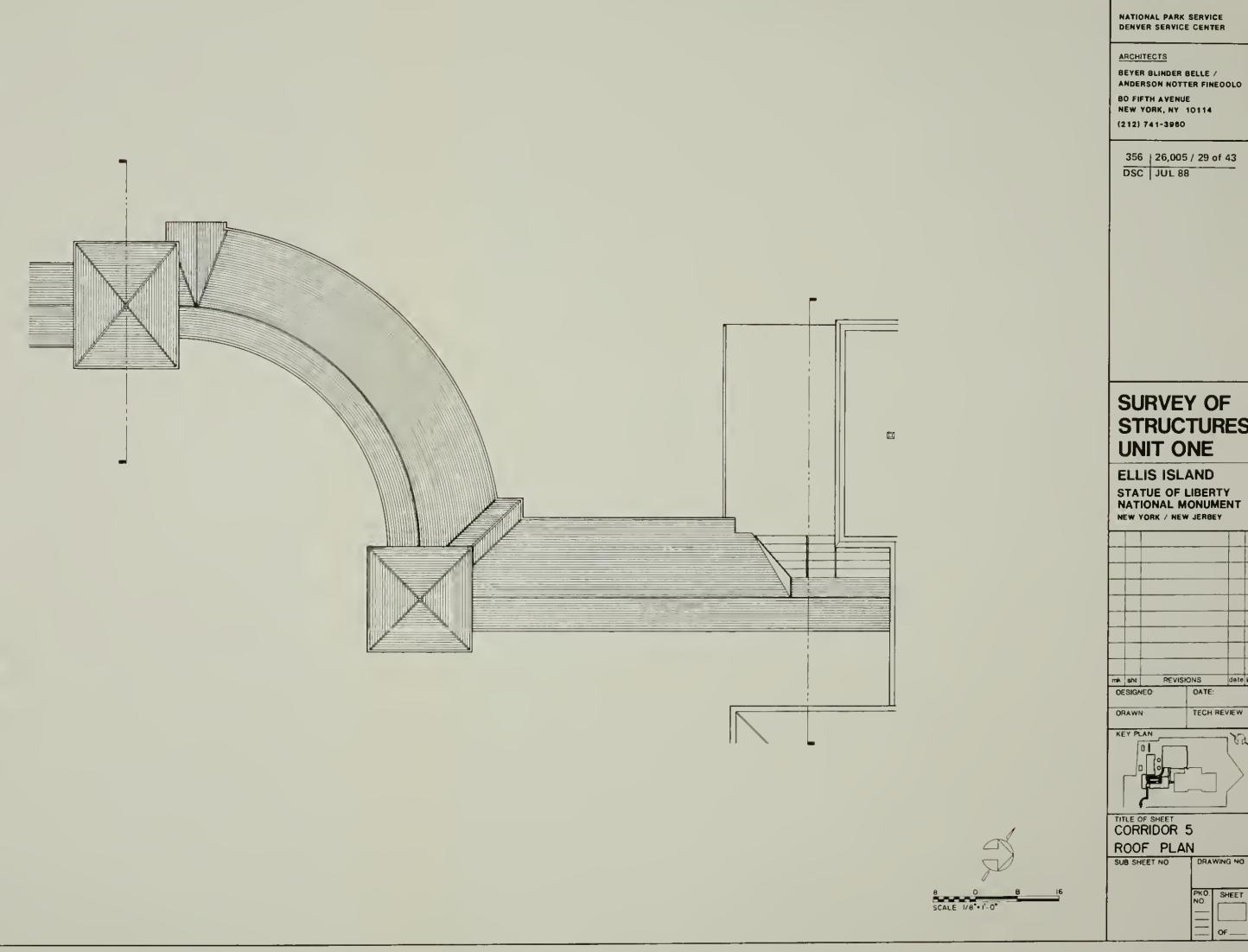
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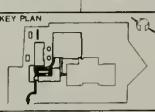


UNITED STATES DEPARTMENT OF THE INTERIOR

Exhibit 5

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11. Missing brick at corner of window sill, northeast pavilion.



12. Crumbling brick and temporary wood support, east elevation of C-5 adjacent to powerhouse, view west.



13. Exposed corroding beam causing concrete spalling, lintel on gabled projection.



14. Two arches at the northern end of east elevation; filled in with wood supports and tar paper; view southwest.



15. Rotting, broken, and missing windows and wood panels, west elevation.



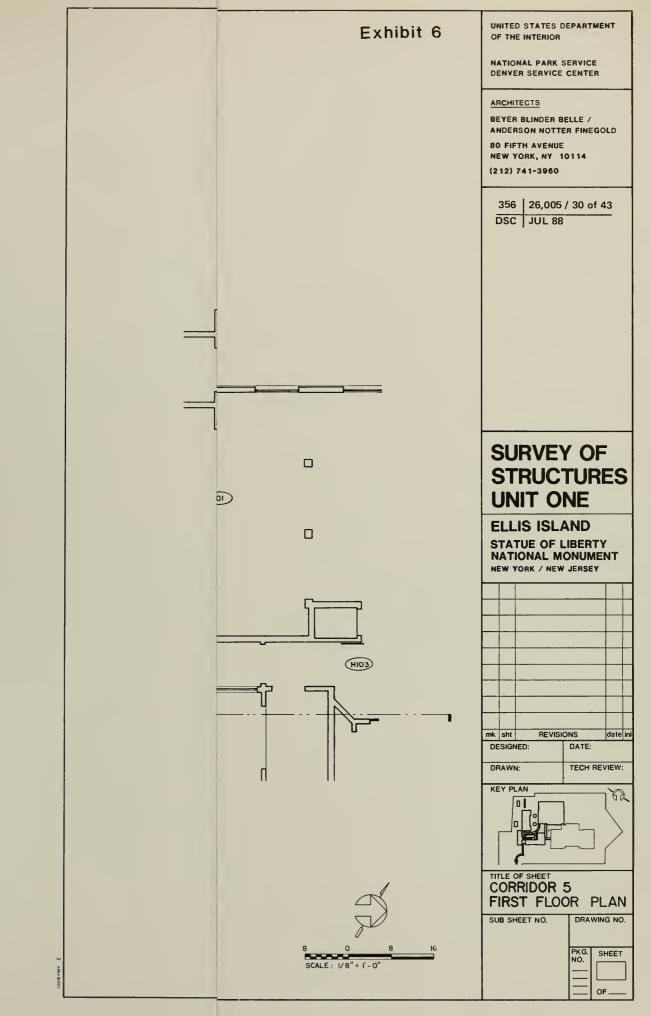
16. Rotting, broken, and missing window, west elevation.

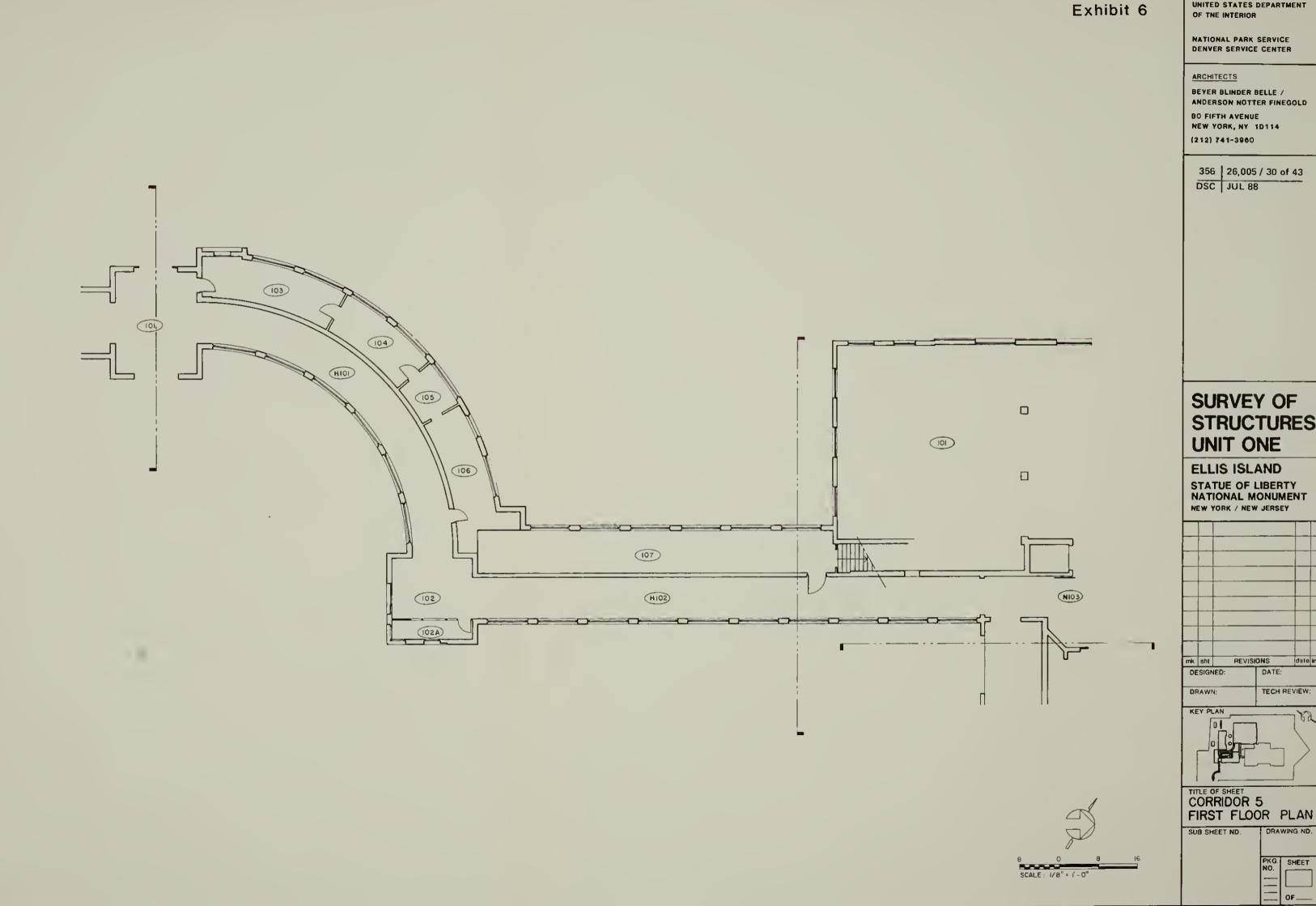


 Missing section of downspout, west elevation.



18. Torn flashing at juncture of gabled projection and pavilion, west elevation.





UNITED STATES DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE DENVER SERVICE CENTER

ARCHITECTS

BEYER BLINDER BELLE / ANDERSON NOTTER FINEGOLD BO FIFTH AVENUE

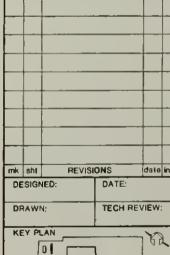
NEW YORK, NY 10114

356 | 26,005 / 30 of 43 DSC | JUL 88

SURVEY OF STRUCTURES **UNIT ONE**

ELLIS ISLAND

STATUE OF LIBERTY NATIONAL MONUMENT NEW YORK / NEW JERSEY



TITLE OF SHEET CORRIDOR 5 FIRST FLOOR PLAN

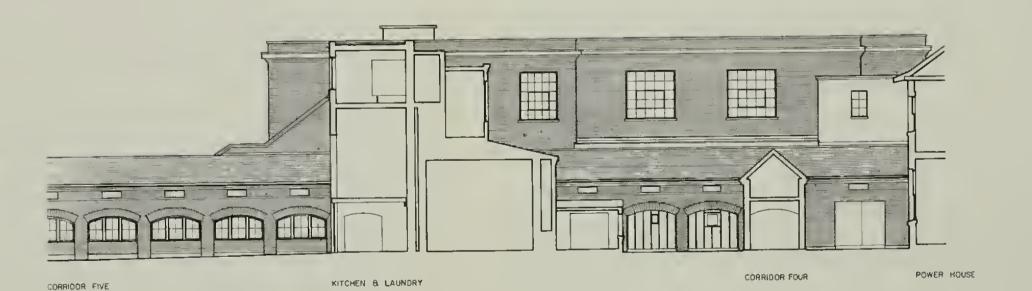
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CORRIDOR FIVE

SOUTH ELEVATION

BAKERY & CARPENTRY



KITCHEN & LAUNDRY

EAST ELEVATION

Exhibit 7

UNITED STATES DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE DENVER SERVICE CENTER

ARCHITECTS

BEYER BLINDER BELLE / ANDERSON NOTTER FINEGOLD

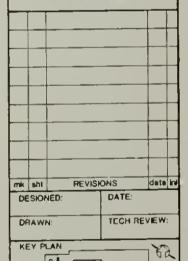
80 FIFTH AVENUE NEW YORK, NY 10114

(112) 741-1060

356 | 26,005 / 31 of 43 DSC | JUL 88

SURVEY OF STRUCTURES UNIT ONE

ELLIS ISLAND
STATUE OF LIBERTY
NATIONAL MONUMENT
NEW YORK / NEW JERSEY



TITLE OF SHEET

BAKERY & CARPENTRY SOUTH & EAST ELEV.

SUB SHEET NO.

PKG. SHEET

PKG. SHEET NO.

8 D 8 16 SCALE: 1/8°-1'-0"



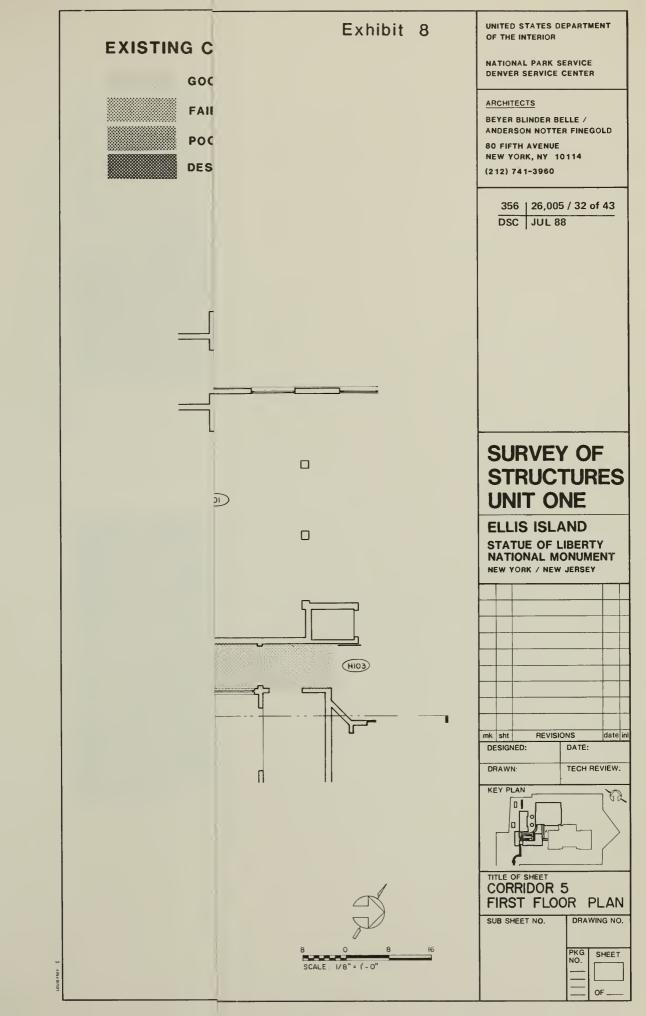
19. C-5- east side of corridor looking north to power-house.

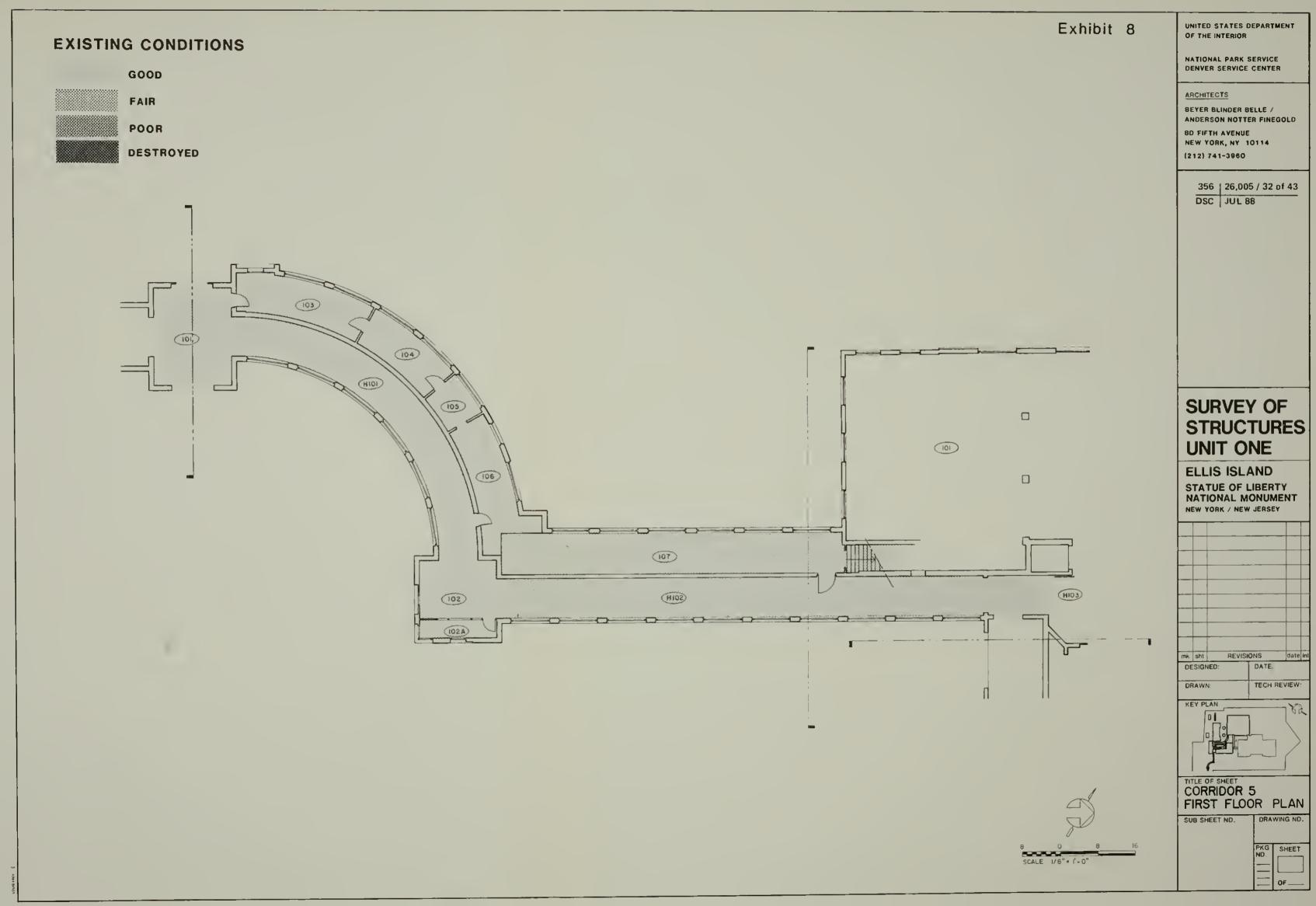


20.C-5- northern section looking toward entry to power-house. Bakery and carpentry at left. Entrance arch to C-4 at right.



21. Western half of C-5, room 107, looking north to stairway entrance.







22. Sectional radiator, room 103.



23. RLM-type fixture, typical in western rooms.



24. C-5- transverse ceiling slab cracks.

7. Covered Way 6 (C-6)

a. Exterior

The one-story corridor connecting the main building/railroad ticket office with the baggage and dormitory building was built in 1909. It is a steel frame and terra-cotta block structure clad in red brick laid in Flemish bond. The corridor has a limestone base, sills, window trim, cornice, and coping. Arched wood sash windows are identical to those of the main building: Nine-overnine-over-nine with sidelights. There are three on the west elevation and one each on the north and south elevations (photos 1-3). Windows have wire mesh guards. Hall 104 of the baggage and dormitory building (constructed in 1924) abuts the northernmost window bay on the west elevation. The flat roof is sheathed in flat terra-cotta tiles (photo 4). Exhibit 1 depicts the elevations of C-6.

This corridor is generally in good condition due to its protected location between the main building, the railroad ticket office, and the baggage and dormitory building. The brick is in good condition although some pointing may be required at the parapet. Limestone joints are open and must be repointed. Wire mesh window guards and anchor bolts are corroded and have caused iron staining at limestone window sills and enframements. Efflorescence is pronounced at the juncture with the baggage and dormitory building on both the east and west elevations. The tile roof appears to be in good condition.

b. Room Use

The corridor originally provided passage from the railroad ticket office to the baggage and dormitory building

via a stair in the center of the east wall. A small post office occupied the southwest corner of the room until 1924, when it was moved to a new partitioned space in the baggage and dormitory building. In 1924 double doors were cut into the south wall, and a new enclosed ramp to the landing of the main building's northwest tower stair was built. At the same time, the opening in the east wall was filled in and replaced by a new set of doors, cut in the bay to the north A ramp along the north wall of the original doors. connected the two levels. A 1934 plan specified the removal of the ramp and infill of the east wall doors with windows to match the original. A plan of 1935 designates the room as part of the "Supervisor's Room" (along with room 104 of the baggage and dormitory building). U.S. Coast Guard alteration plans of 1939 designate the space as "commissary storage and work room" with refrigerators along the south wall, blocking the south doors. The room was opened up as a passage again after the Coast Guard moved out in 1946.

c. Interior

The interior of this connector is finished with plaster walls and ceilings, a white hexagonal tile floor and white tile wainscot. The east wall is the exterior wall of the railroad ticket office. It has cast-iron Tuscan columns above molded copper panels. Temporary wood steps and a landing in the southeast corner lead up to the railroad ticket office. Two fiberboard partitions with wood trim and a veneer door form an office in the northeast corner of the room. A temporary wood railing with overhead protection provides passage between the main building and the baggage and dormitory buildings (photos 5-8).

The plaster ceiling and walls are in very poor condition. The metal frame and lath is exposed around the

perimeter and large areas of plaster have fallen off. The plaster of the south, west, and north walls is almost entirely destroyed with exposed terra-cotta block. The copper panels and cast-iron columns of the east wall are intact, though surface corroded, and the original window glass above the panels has been removed.

The tile wainscot is in poor condition and is buckled in the northeast corner with sections missing on the south wall. The tile floor exhibits some cracking and areas of patching. Four small investigative holes have been cut through the floor in various locations.

d. Mechanical

This connector was heated by two-pipe sectional cast-iron radiators served by steam lines run from the crawl space below the baggage and dormitory building.

A new 24-inch diameter cast-iron manhole and steel-plated cover was constructed in the floor of the annex passage in 1924. It was necessary to provide access under the floor to reach the pipes for installation of additional radiators and electrical conduits in the annex and the baggage and dormitory building. 15

Radiators may be reused after thorough cleaning and testing. None of the existing piping can be retained due to its advanced state of deterioration. 16

¹⁵Unrau, p. 377.

¹⁶Syska & Hennessy.

e. Structural 17

The roof structure of this one-story connector is a reinforced concrete slab supported by structural steel beams bearing on the exterior brick walls. The floor structure is a 10" structural clay tile flat arch on steel beams which is supported by the exterior walls and two interior brick piers. The arch is sheathed with 5" of black cinder concrete with a ceramic tile finish. A very low crawl space is located under the structure.

The roof beams are corroded, but not seriously. The excessive deflection is caused by the underdesign of the beams. Floor beams are corroded to an unknown extent.

The north and south walls and east parapet are badly cracked due to expansion and contraction of the directly connected railroad ticket office.

 $^{^{17}\}mathrm{Based}$ on Robert Silman Associates, P.C., "Supplement," pp. 2, 4.

f. Recommendations 18

The design work for this area was done as part of the main building work. It consisted of installing expansion joints in the masonry walls at the juncture with the railroad ticket office, adding new steel roof beams between the existing ones to relieve stress, and stripping the floor slab from the existing beams to determine the state of decomposition of these beams. A new concrete slab on steel deck will be installed.

¹⁸Ibid., p. 7.



1. C-6- west facade, view from corridor 2.



2. C-6- west facade, view from courtyard.



 C-6- north facade, view south, with baggage and dormitory building at right.



4. C-6- roof, view east.



5. View toward southwest corner.



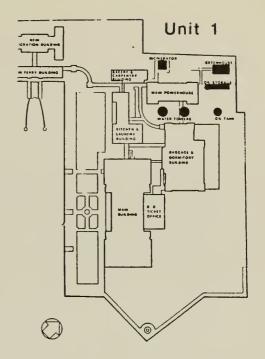
6. View toward northeast corner.



7. View of southeast corner toward 8. Northeast corner inside office. railroad ticket office.







F. FREESTANDING STRUCTURES



1. Incinerator

a. Construction History

The existing incinerator is the second such structure to occupy its site between the powerhouse and the seawall. The first incinerator was constructed in 1901. Exhibit 1 depicts the original plans. It was replaced in 1911 after it had become unsound and inadequate in size (exhibit 2 and photo 1). The function of the garbage crematory, as it was called, was to burn all garbage and refuse on the island.

There were two combustion incinerators in the second building. A manually operated can hoist was installed in the early 1920's. Both incinerator chambers were relined, the westerly one in 1932 and the easterly one in 1934.

A contract for a self-supporting steel stack, installed on a reinforced concrete foundation, was let in 1934. In 1937, a metal extension of structural iron framing covered by a corrugated copper roof was added to the western side of the building as housing for a power-driven scrap metal baler (exhibit 3). The new Logemann baler compacted metal into bales weighing 30-50 pounds, replacing an old hand-operated scrap metal press (exhibit 4).

In 1942, repairs were made to the manually operated can hoist. No further documentation exists for this structure. 1

b. <u>Drawings</u>

In July 1984 the architectural/engineering team measured the incinerator. Drawings at 1/4" scale were prepared that depict the "as found" conditions of both the exterior and interior. See exhibits 5 and 6.

c. Exterior

The one-story stucco incinerator rests on an extended concrete slab base. It has a cornice, six-light wood sash windows with iron grilles, and a pair of metal doors on the south elevation. A steel smokestack is located at the northeast corner. Low concrete enclosure walls are located at the southeast corner and on the north side. Structural iron framing extends outward from the west side of the building. A baler sits under this framing (originally a roofed enclosure) at the southwest corner. A free-standing brick furnace is located west of the incinerator (photos 2-6).

The exterior exhibits severe cracking and spalling, particularly at the west elevation and adjacent to the smokestack (photos 7 and 8). In addition, patches of stucco are missing, particularly at the northwest corner and at the cornice. Most of the low concrete enclosure wall is

¹U.S. Department of the Interior, National Park Service, Denver Service Center, "Historic Structure Report; Ellis Island; Historical Data," by Harlan D. Unrau, 1981, pp. 581-583.

destroyed on the south and west sides, while the northern wall is still partially intact. All metal elements, including the smokestack and the iron framing, are corroded and have contributed to iron staining. Copper staining on the west elevation is due to run-off from the original copper roof on the metal extension. The brick furnace is in poor condition. It exhibits mortar loss, cracking, spalling and loss of material.

d. Interior

The interior consists of a narrow passage between the two incinerators along the east and west walls and a small loading space along the south end of the incinerators. An iron ladder at the south end provides access to the cast-iron charging platform and the tops of the incinerators (photo 9). The floor is concrete slab and the walls and ceiling are parged concrete flush with the exposed bottom flange of steel beams. One circular hole in the ceiling over each incinerator marks the location of flues.

The incinerators have cast-iron fronts with two doors and white glazed brick facing on the side walls. Eight cast-iron firing doors and fire brick are located in the interior cavities (photo 10).

All metal surfaces are heavily corroded and pitted. Concrete parging has peeled away in areas. The white glazed brick exhibits iron staining, cracking and spalling.

e. Mechanical²

The building is fed by an underground conduit from the powerhouse which contains electrical wiring. Interior lighting, conduit and wiring is badly deteriorated.

Steam from the powerhouse central piping distribution system was not supplied to this building. There is no evidence of any existing heating system.

Water is provided to the incinerator from an underground main fed from the powerhouse. All water supply piping is unserviceable.

f. Structural³

This one-story structure has exterior brick bearing walls that support a reinforced wood-formed concrete roof slab on steel beams. The building sits on a ground floor concrete slab at grade.

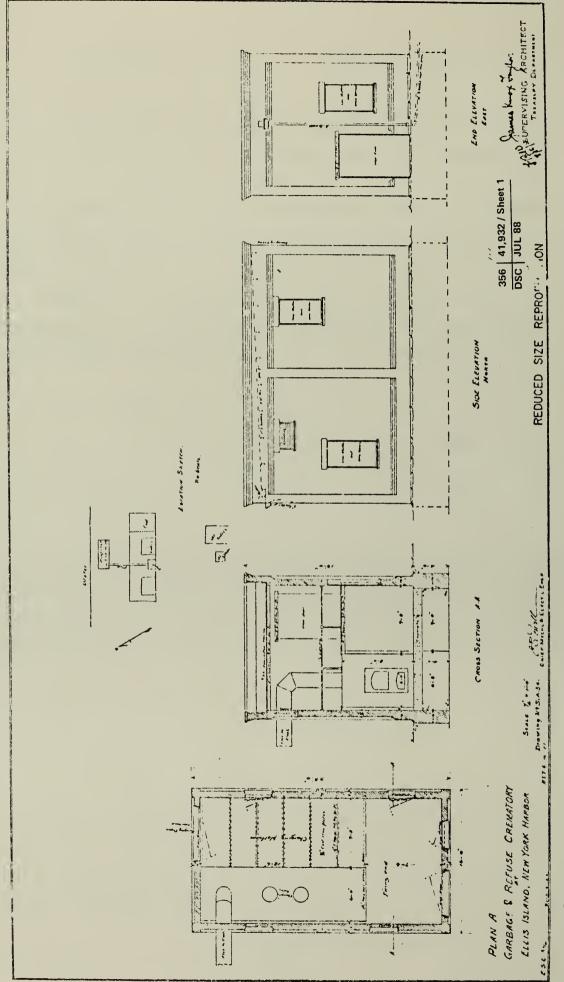
Cracks in the exterior wall indicate that differential settlement has occurred. The grade slab has also cracked and settled. There has been some moderate and severe corrosion in both roof steel and lintel steel.

²Based on Syska & Hennessy, Inc., "Ellis Island; Historic Survey Report; Mechanical Systems," December 1984.

³Based on Robert Silman Associates, P.C., "Supplement to Ellis Island; Historic Structures Report; Structural Systems," December 1984, pp. 3, 5, 8.

g. Building Removal

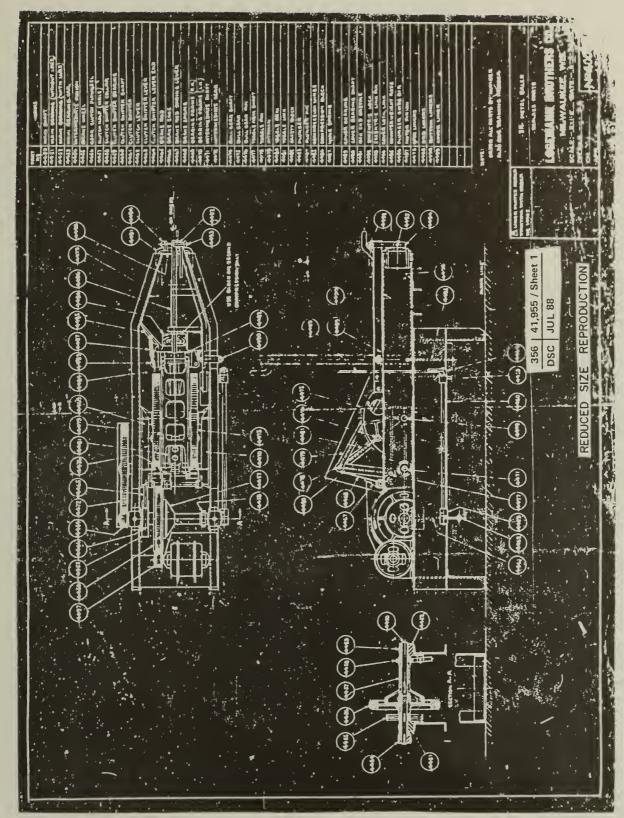
The incinerator is of minor historical and architectural significance. Due to deterioration and interference with plans for permanent site utilities the architectural engineering team, in conjunction with the National Park Service, determined that this building should be demolished. Documentation for the incinerator was submitted to the Historic American Buildings Survey (HABS) in February 1985. The structure was officially recorded under the name "U.S. Immigration Station, Incinerator" and assigned HABS No. NY-6086-B. See Appendix B for a copy of the HABS documentation. The incinerator was demolished in March 1985.



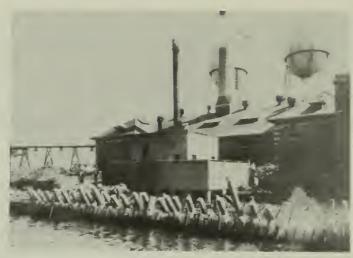
Plans for original garbage and refuse crematory, 1901.

"Details of Furnace- Proposed New Crematory", 1911. NPS Drawing No. 762/44.133:2

"Sheet Metal Extension to Garbage Incinerator Building"- 1937.



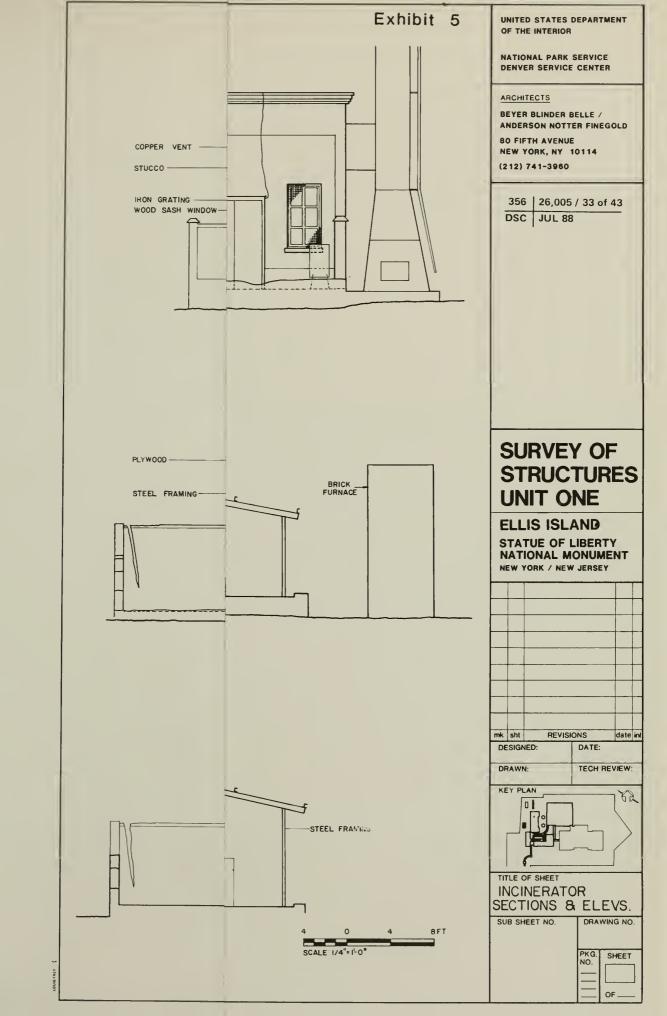
Logeman Bros. Co., Milwaukee, Wisconsin, "Metal baler- replace parts", 1937(?), NPS Drawing No. 462/41.955.

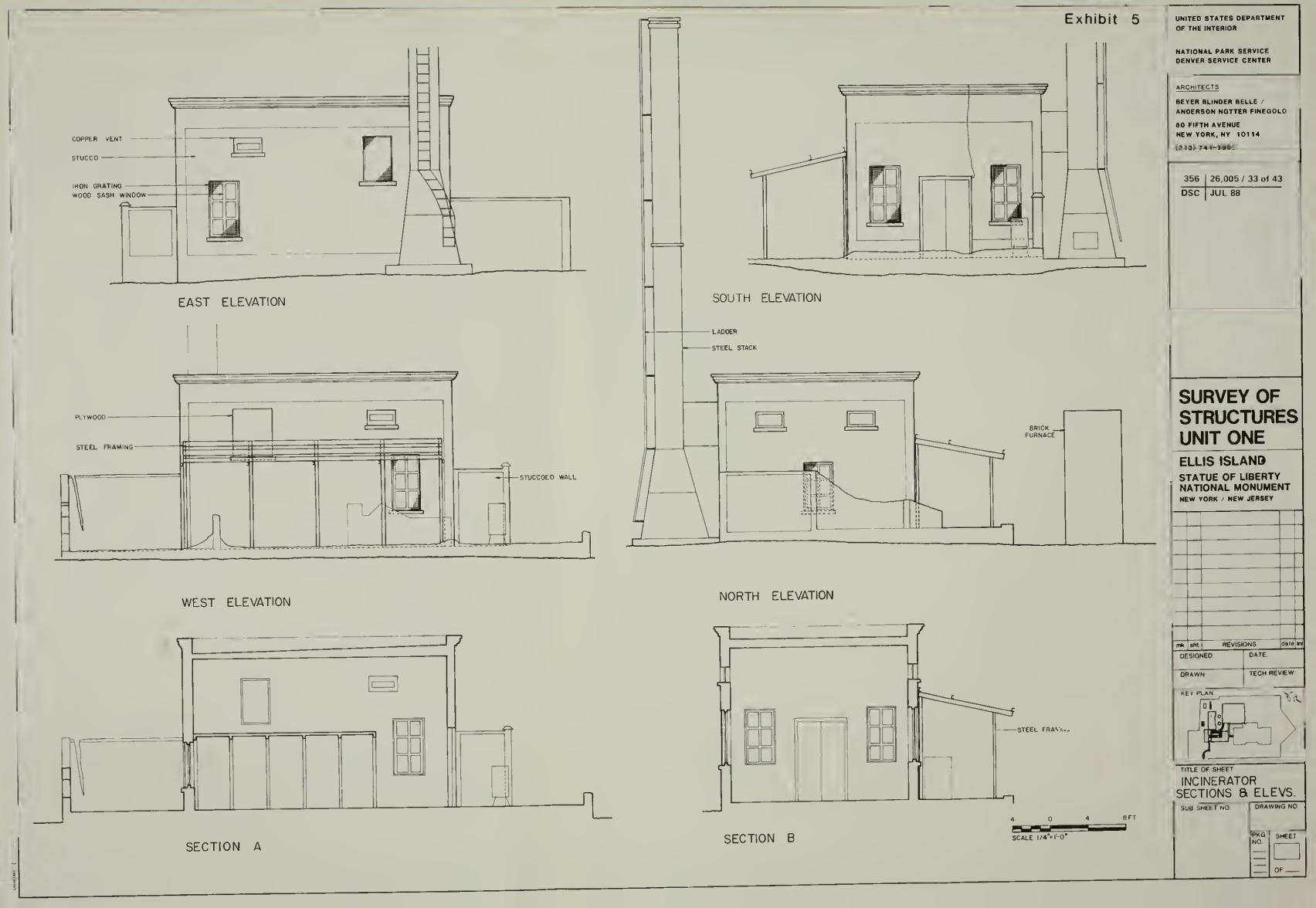


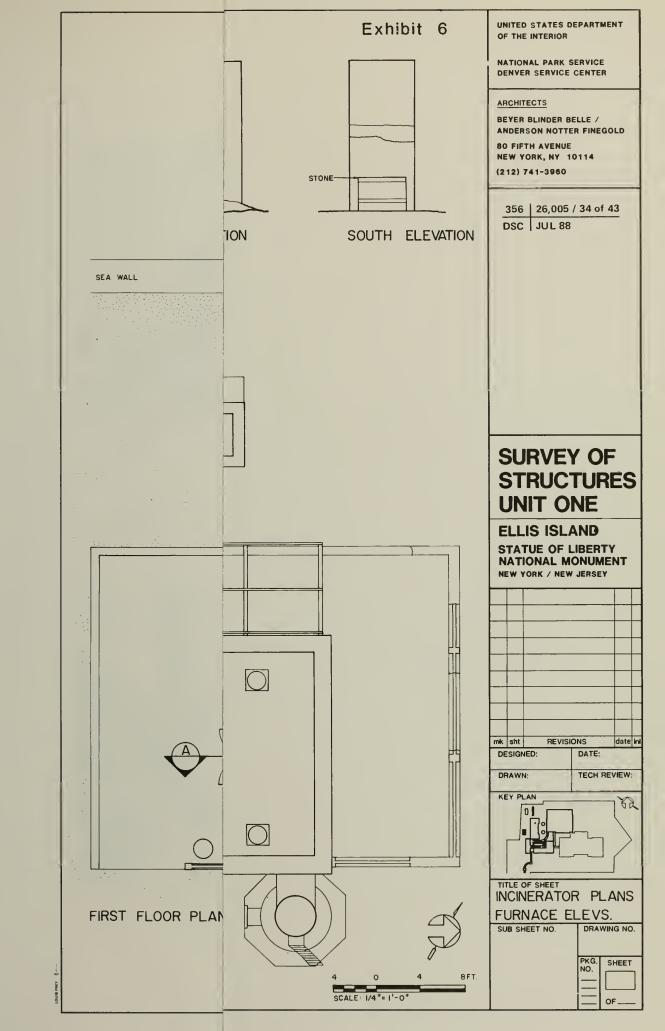
 South and west facades of incinerator with enclosure wall, during construction of new seawall, September 1934. National Archives, Audiovisual Archives Division, Still Picture Branch.

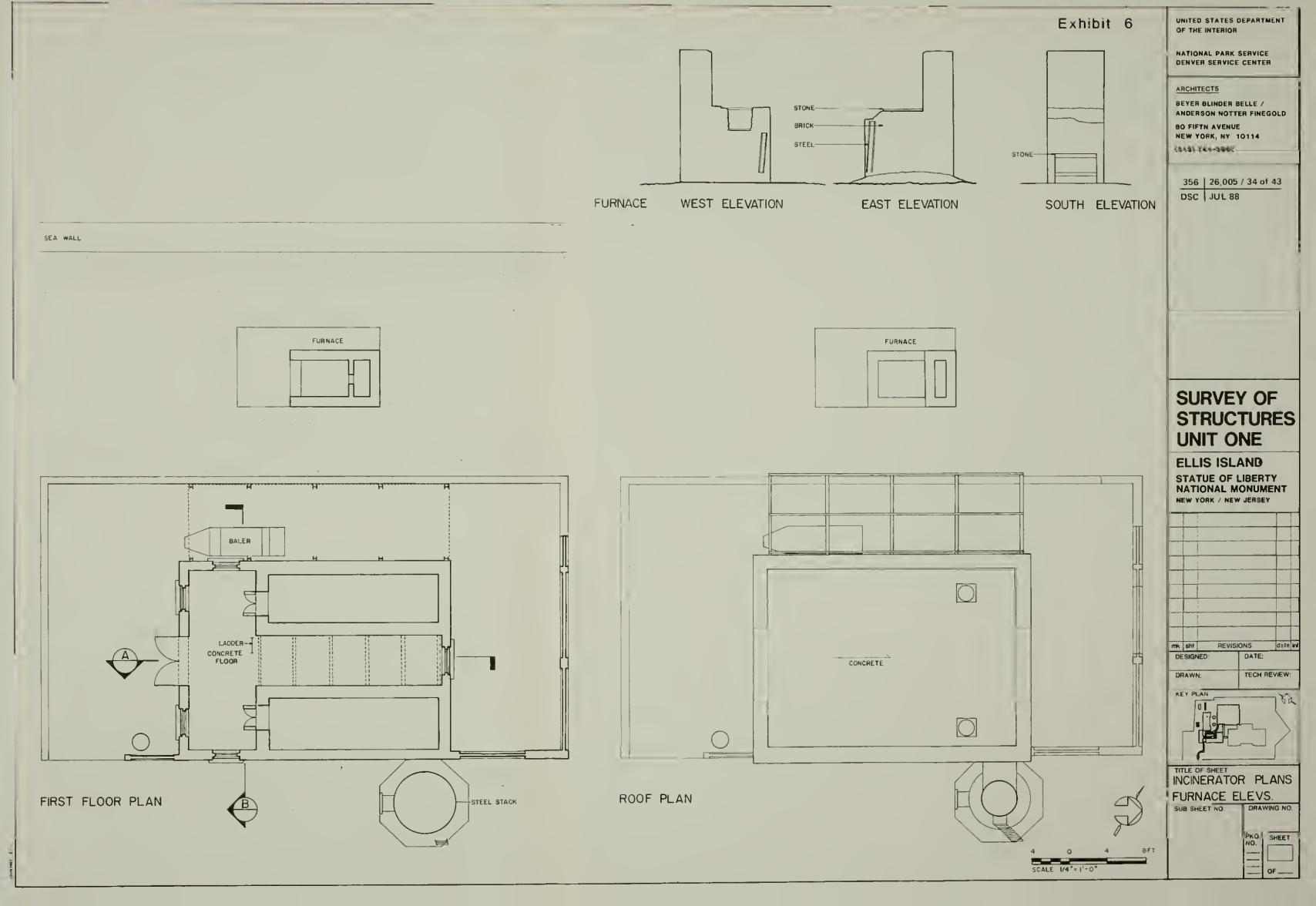


2. South and east facades, smokestack, view northwest.











3. East elevation, view west.



4. North elevation, view south.



5. West elevation, furnace, view east.



6. Entrance, south elevation, view north.



7. Cracking and spalling at east elevation, adjacent to smokestack.



8. Severe cracking, south elevation.



9. View north from entry of incinerator.



10. Front of eastern incinerator.

2. Shelter

a. Construction History

The erection of the one-story brick shelter was included in a contract for repaving locations along the ferry slip on island 1 and for the construction of two shelters and a recreation building. The building was used exclusively by those detained on island 1 from its completion date in 1937 until 1954. 4

It was built with a central pavilion open on the east with a solid west wall. The open piers of the east wall were filled in to form a solid brick wall with small hopper sash windows. A brick entry vestibule was probably added at the same time. Exhibit 1 depicts the original plans for the shelter. Photo 1 shows the shelter on island 2 (similar to the one on island 1) in 1938.

b. Drawings

In July 1984 the architectural/engineering team measured the shelter building. Drawings at 1/4" scale were prepared that depict the "as found" conditions. See exhibits 2 and 3.

c. Exterior

The rectangular brick structure has a flat built-up roof and rests on a cement base. Decorative elements include Flemish brick bond with dark headers, brick pilasters with terra-cotta caps and bases on east and west

⁴ Unrau, pp. 597-599.

facades, a terra-cotta entablature, and coping. The east facade features six square hopper sash windows, one between each pair of pilasters, a central door and a bull's-eye window at each end. The west facade also has a bull's eye window at each end. The north and south ends each have two bull's eye windows. All of the windows have vertical metal guards (photos 2-5).

Most window glazing on the east side is missing and the framing deteriorated (photo 6). The brick vestibule appears to be in danger of collapse as it leans away from the building. The roof has fallen in and the southern door is destroyed. The brick facade appears to be in good condition though some spalling has occurred on the west facade, just below the parapet and along the base of the building. A few of the terra-cotta pilaster caps are cracked and some of the pilaster bases are chipped. A few holes in the terra-cotta entablature are present on the west elevation (photo 7). Window guards are corroded.

A brick entry vestibule with two windows and a door was at the east elevation. This structure was in a highly deteriorated and dangerous condition; mortar was crumbling and the vestibule was detached and tilting away from the building. Consequently, the vestibule was removed in September 1984.

d. <u>Interior</u>

The interior consists of one small room on either side of a long narrow room (once open on the east side). The two end rooms have concrete floors, plastered walls over terra-cotta block and hung plaster ceilings (photo 8). The center room (room 102) has a scored concrete floor, painted brick walls and a concrete ceiling (photo 9). The areas of

brick infill between the piers can be discerned on the east wall (photo 12).

The door to the north room, (room 103), is of solid galvanized metal. The word "SOLITARY" is stenciled on the outside, giving evidence of its most recent use as solitary confinement (photo 10). A crude calendar has been scratched in the paint on the south wall (photo 11).

The concrete flooring and ceiling are in good condition. The plaster walls and ceiling of the two end rooms are deteriorating, with areas of exposed terra-cotta and ceiling lath. The center room is in good condition with general wearing away of paint on the brick wall, especially along the top of the wall. A minimum of brick spalling occurs along the base of the west wall.

e. Mechanical Systems⁵

The building is fed by an underground conduit from the powerhouse containing wiring for both interior and exterior lighting. The interior lighting fixtures are bare lamps in ceiling mounted sockets.

Exterior fixtures and conduit are badly deteriorated and should be replaced with new conduit and fixtures.

Low-pressure steam from the powerhouse was used to heat this building. The steam supply piping was installed above grade from the north side of the powerhouse to the south side of the shelter. Wall mounted sectional cast-iron radiators provided perimeter radiation (photo 12).

⁵Based on Syska & Hennessy.

None of the existing piping can be retained due to the advanced state of deterioration. Radiators may be used after thorough cleaning and testing.

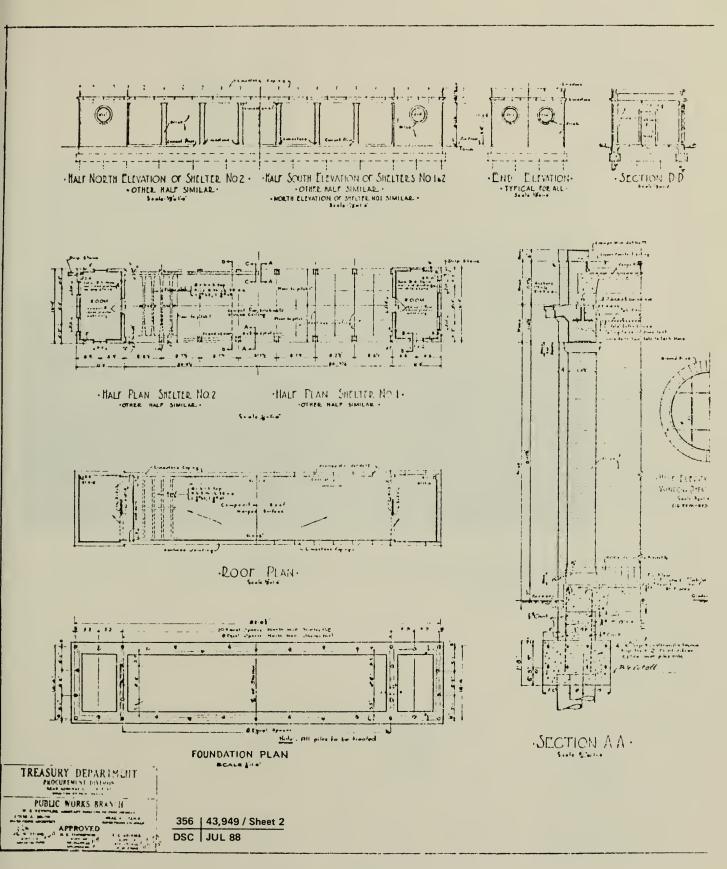
Water for the shelter is provided by an underground water main from the powerhouse that rises up in the toilet room at the south wall of the building. All water supply piping needs replacement. Two sinks, a drinking fountain, a urinal, two toilets, and enclosed aluminum shower units are intact fixtures from the 1940's (photos 13-14).

f. Structural System⁶

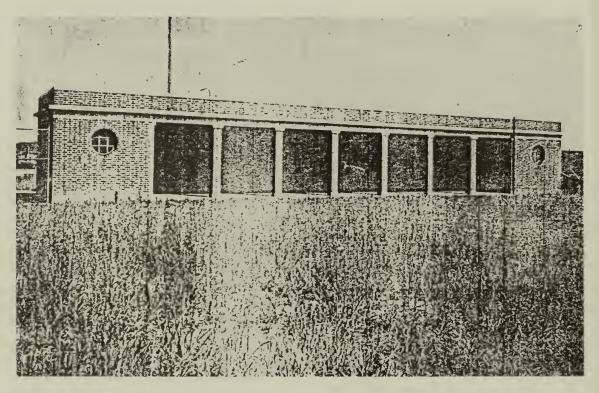
This one-story structure has brick bearing walls. The flat roof is a wood-formed reinforced concrete slab on concrete fireproofed steel beams.

At the northeast and northwest corners of the parapet there are vertical cracks, caused by expansion movement. These cracks should be routed out and patched with expansion joint material.

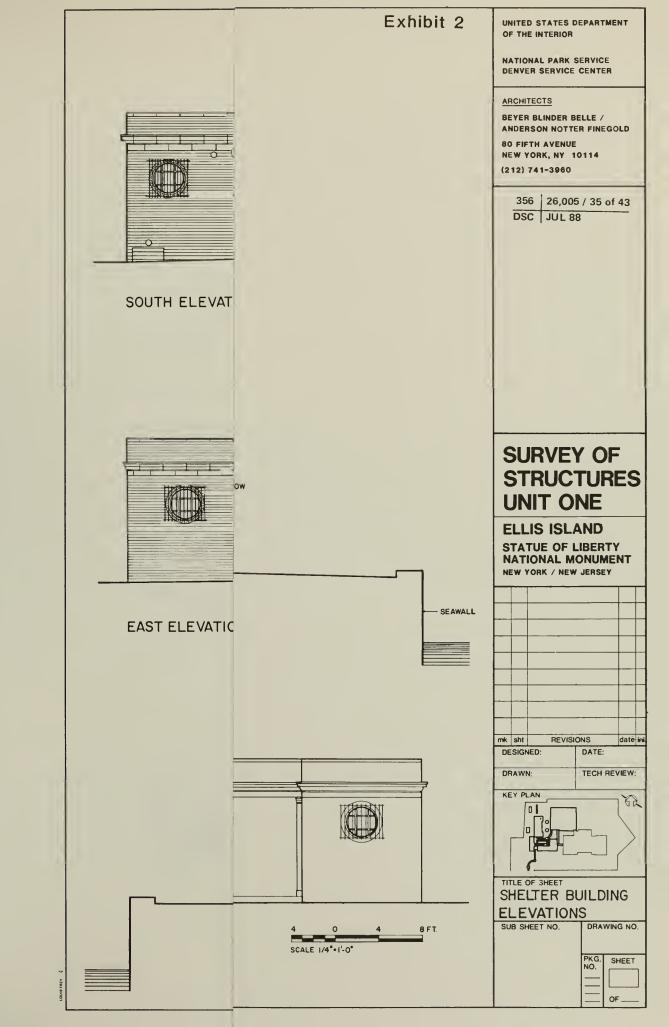
⁶Robert Silman Associates, P.C., pp. 3, 5, 8.

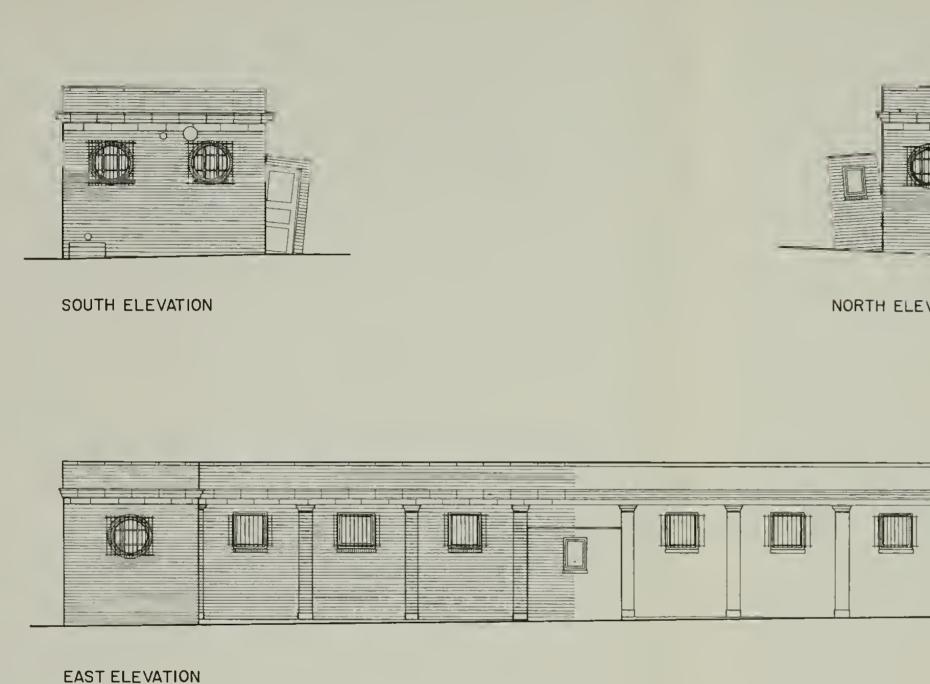


Original plans for Shelters No. 1 and 2, 1935.

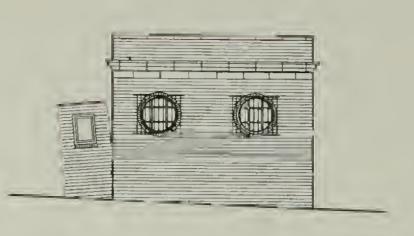


1. Recreation shelter built between islands #2 and #3, 1/18/38. (Identical to the one built on island #1.) National Archives.





WEST ELEVATION



LIMESTONE

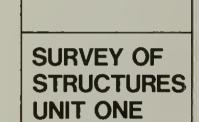
WOOD SASH WINDOW

SCALE 1/4"-1'-0"

METAL GRATING

BRICK LIMESTONE

NORTH ELEVATION



UNITED STATES DEPARTMENT

NATIONAL PARK SERVICE **OENVER SERVICE CENTER**

BEYER BLINGER BELLE / ANGERSON NOTTER FINEGOLO

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OF THE INTERIOR

ARCHITECTS

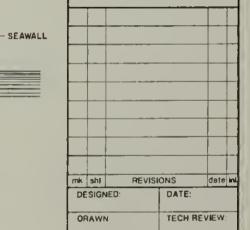
BO FIFTH AVENUE NEW YORK, NY 10114 (212) 741-39BO

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Exhibit 2

ELLIS ISLAND

STATUE OF LIBERTY
NATIONAL MONUMENT NEW YORK / NEW JERSEY

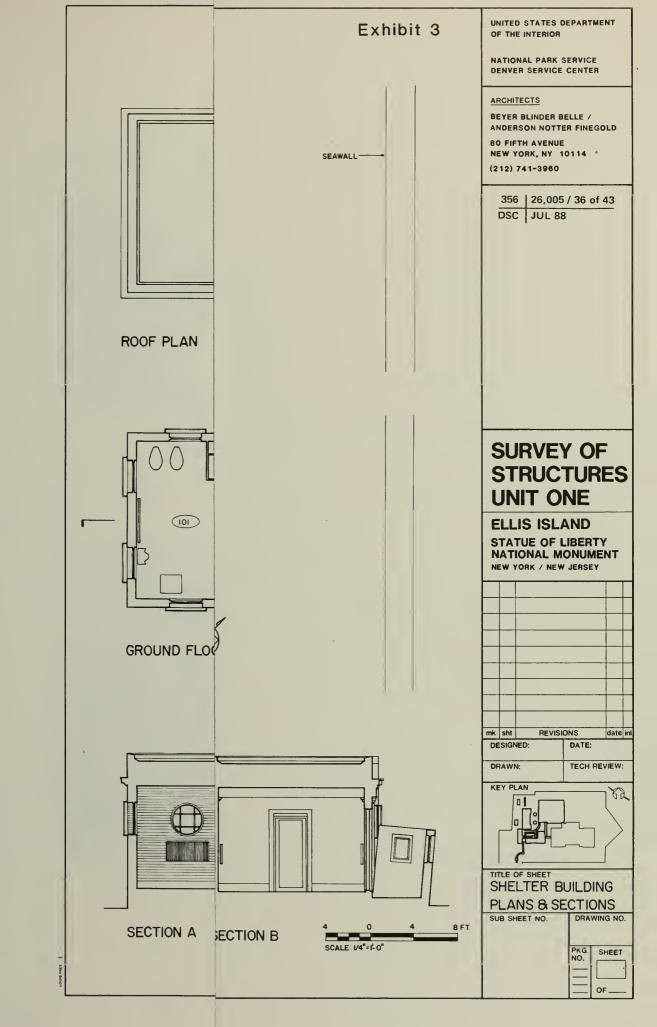


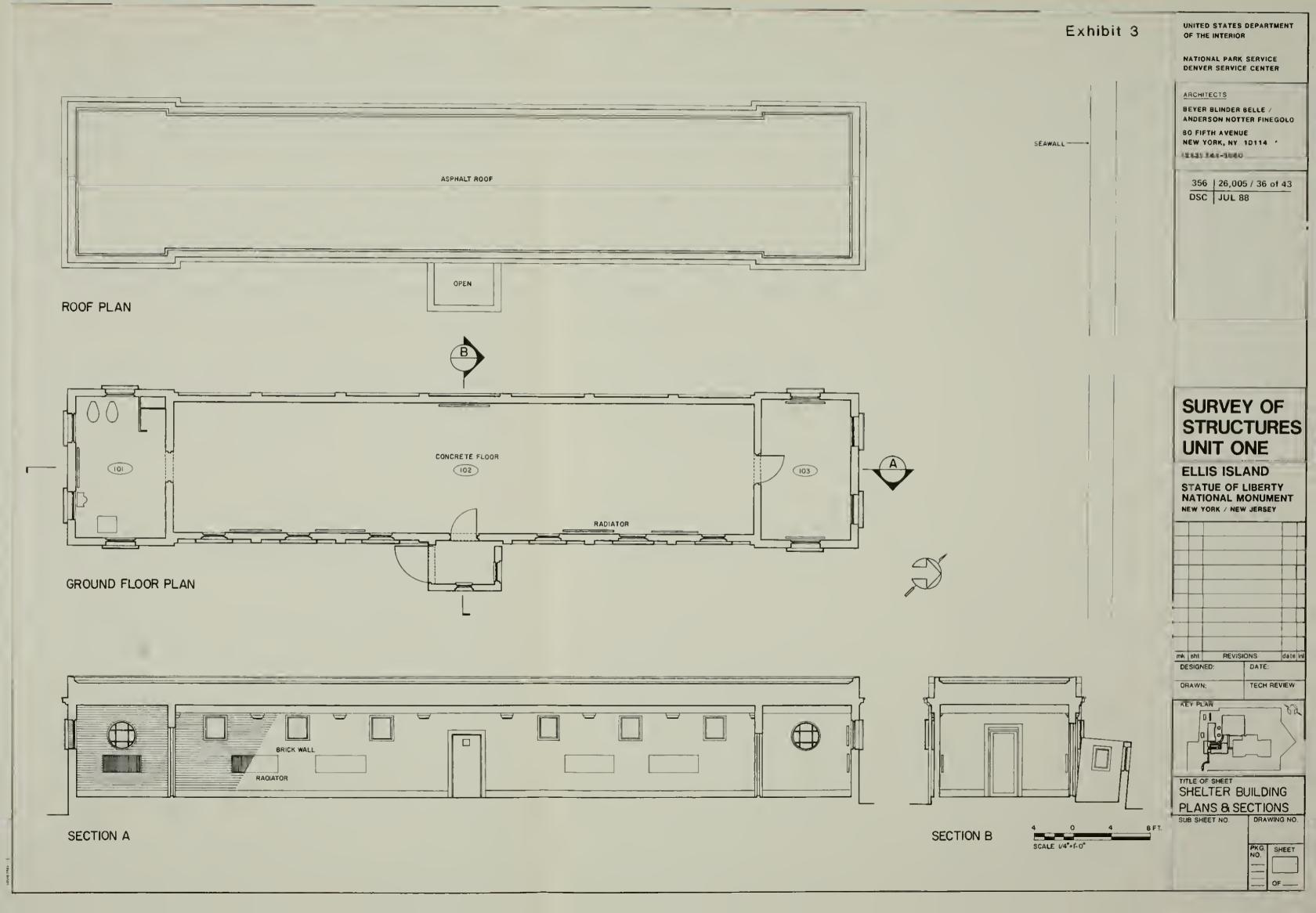
TITLE OF SHEET SHELTER BUILDING

ELEVATIONS SUB SHEET NO

DRAWING NO.

PKG SHEET







2. East and north elevations, view southwest.



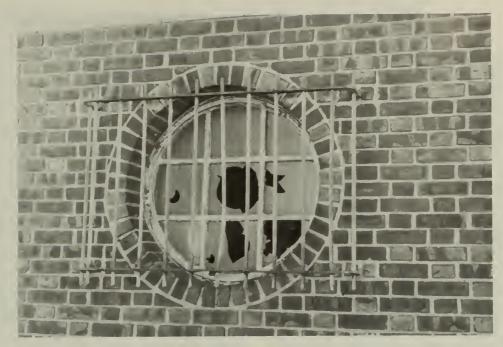
3. North elevation, view south.



4. West elevation, view northeast.



5. South elevation, view northeast.



6. Bull's eye window.



7. Hole and spalling, west elevation.

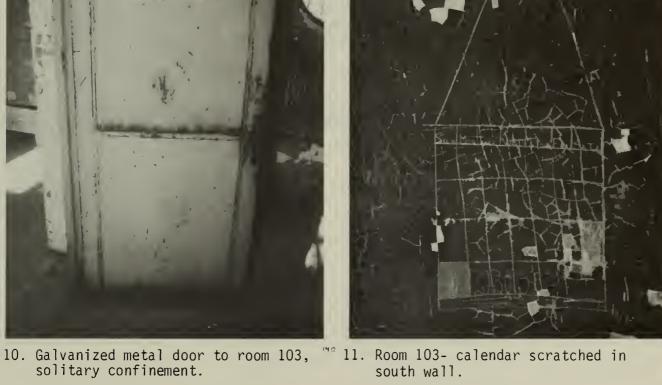


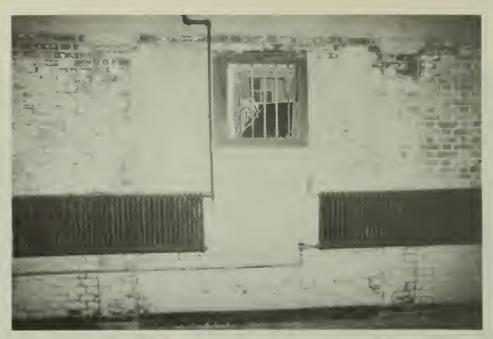
8. Room 103- view of northwest corner, exposed terra-cotta on walls and ceiling lath. 139



9. Room 102- view south.







12. Room 102- wall-mounted radiators on east wall.



Room 103-view east, two wall-mounted 14. Room 103- view west, two toilets, one sinks, one wall-mounted urinal, enclosed aluminum shower, c. 1940's. 13.



3. Greenhouse

a. Construction History

The existing greenhouse, located at the extreme northwest corner of the island, was built in 1935. It replaced a deteriorating greenhouse located north of the main building.

The first greenhouse had been built in 1910 on the foundations of the recently demolished wooden barracks. It was constructed for the purpose of propagating all the flowering plants used in the landscaped beds on the island (photo 1).

The second greenhouse was built by the B & Z Contracting Company. It had a structural steel framework with steel partitions and a plain ridge roof. The greenhouse was supplied with a two-pipe low-pressure steam heating system, as well as plumbing, conduit and wiring. Improvements were made in the early 1940's, including the resetting of all roof glass in new greenhouse putty, replacement of broken and missing glass, repainting of the entire superstructure, the replacement of the ridge cap in red gulf cypress, and the relocation of the vent header. 7

Photos 2-5 show the greenhouse during the 1940's.

⁷Unrau, pp. 589-592.

b. Drawings

In July 1984 the architectural/engineering team measured the greenhouse. Drawings at 1/4" scale were prepared that depict the "as found" conditions. See exhibits 1 and 2.

c. Physical Description

The greenhouse was built with an unfinished concrete base wall approximately four feet in height from the ground. It is a standard greenhouse structure with an angle iron frame, trusses, and pipe columns. Five steel trusses and two longitudinal angle braces support the wood framing for glazing of the gable roof. The plain wood ridge is capped with copper. The top row of the three horizontal bands of roof lights was operable by horizontal bar arms controlled by two wheel cranks at the northern end of the building.

The north and south ends are fifteen lights wide and the east and west sides above the base wall consist of six wood-framed awning windows of six lights each. The wood door on the south end has nine intact upper lights and three wood panels. In front of the entry door is a small square vestibule, with a three foot high concrete wall. All framing above the wall has been destroyed and the weathered door to this vestibule leans against one side.

The flooring of the interior is concrete. Tables consisting of wood frames, pipe legs and metal corners line the perimeter with two long tables down the center. All tabletop surfaces are missing. A narrow room at the north end is formed by a glass wall and doorway. A table is intact along the north and on the south wall is another

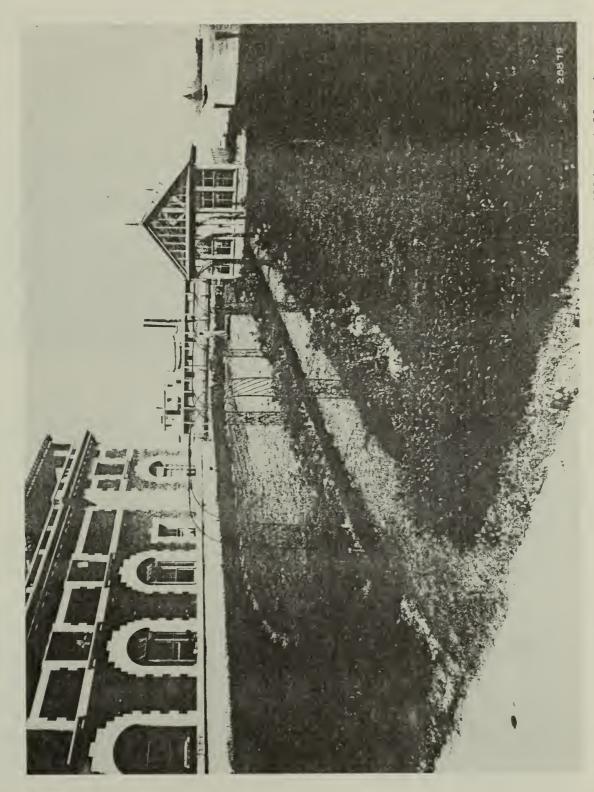
short table and a basin sink. Photos 6 through 14 depict both the exterior and interior.

d. Existing Conditions

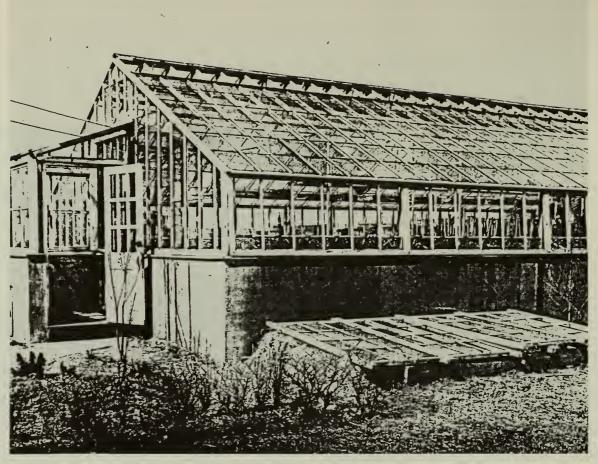
All metal elements display surface corrosion and all wood framing is weathered and split. Pipe columns are rusted out at the bases. At the northern end, almost all wood framing is missing. The majority of glazing is missing or broken. There is some cracking of the foundation wall at the entry. At the time of this visual survey, the interior was overgrown with plants and shrubs.

e. Building Removal

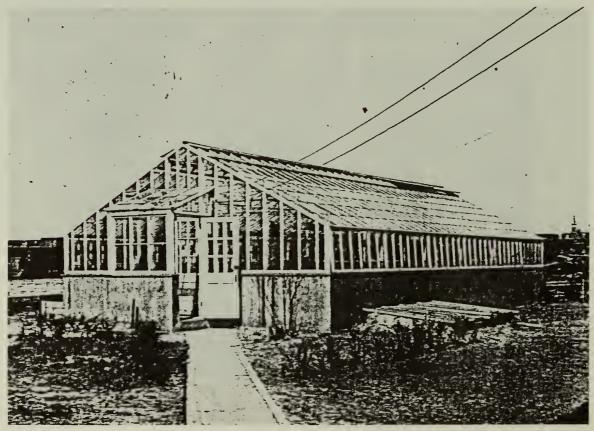
The greenhouse is of minor historical and architectural significance. Due to deterioration and interference with plans for permanent site utilities the architectural/engineering team, in conjunction with the National Park Service, determined that this building should be demolished. Documentation for the incinerator was submitted to the Historic American Buildings Survey (HABS) in February 1985. The structure was officially recorded under the name "U.S. Immigration Station Greenhouse" and assigned HABS No. NY-6086-A. See Appendix C for a copy of the HABS documentation. The greenhouse was demolished in March 1985.



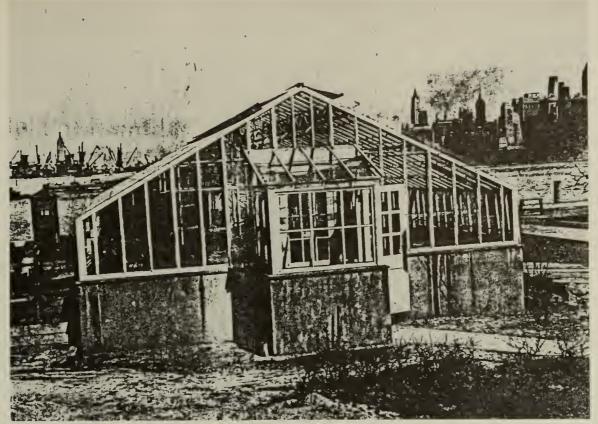
First greenhouse, ca. 1910, Edwin Levick, photographer. William Williams Collection No. 38. New York Public Library, Local History and Genealogy Division.



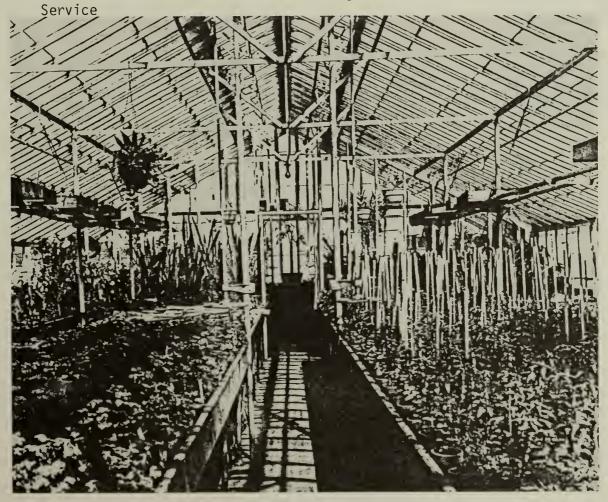
2. South end of greenhouse, WWII-U.S. Immigration and Naturalization Service.



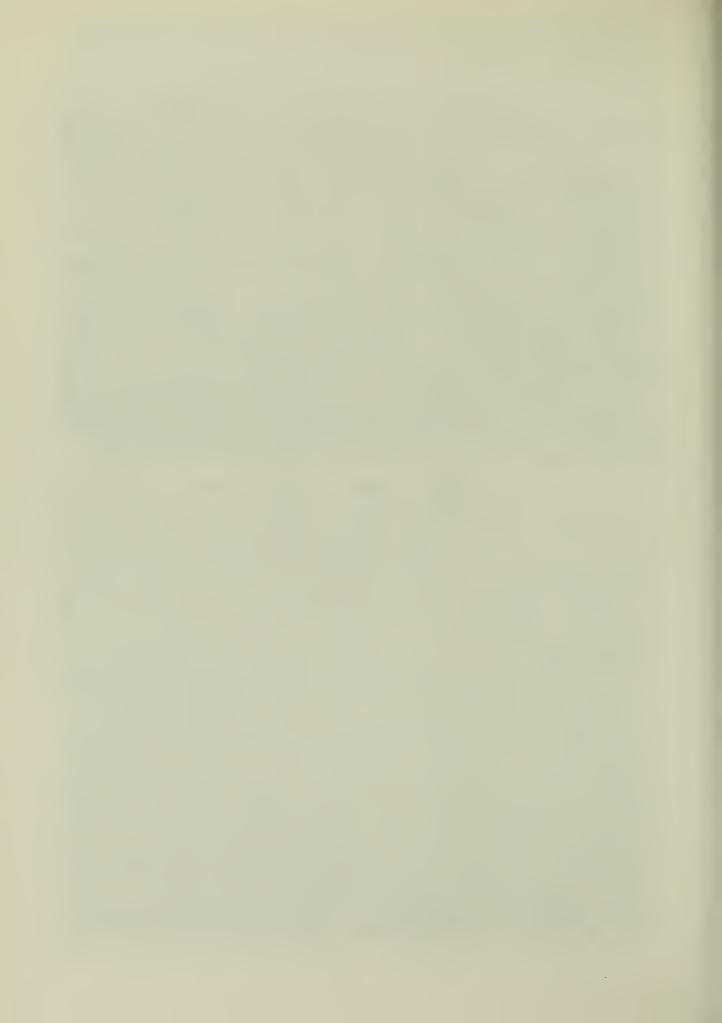
3. South end of greenhouse, WWII, U.S. Immigration and Naturalization Service.

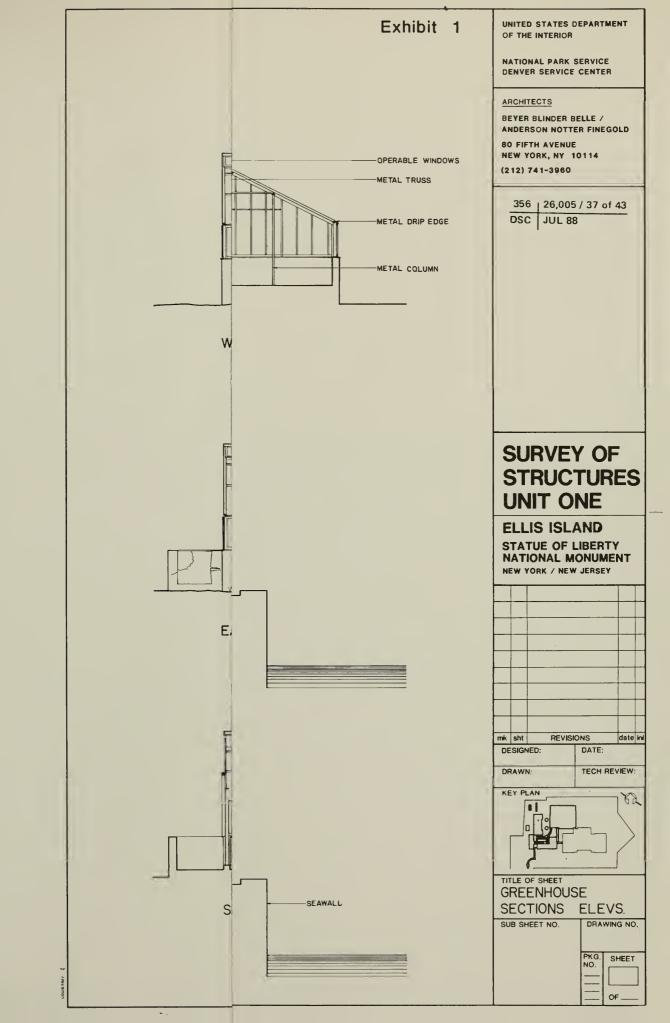


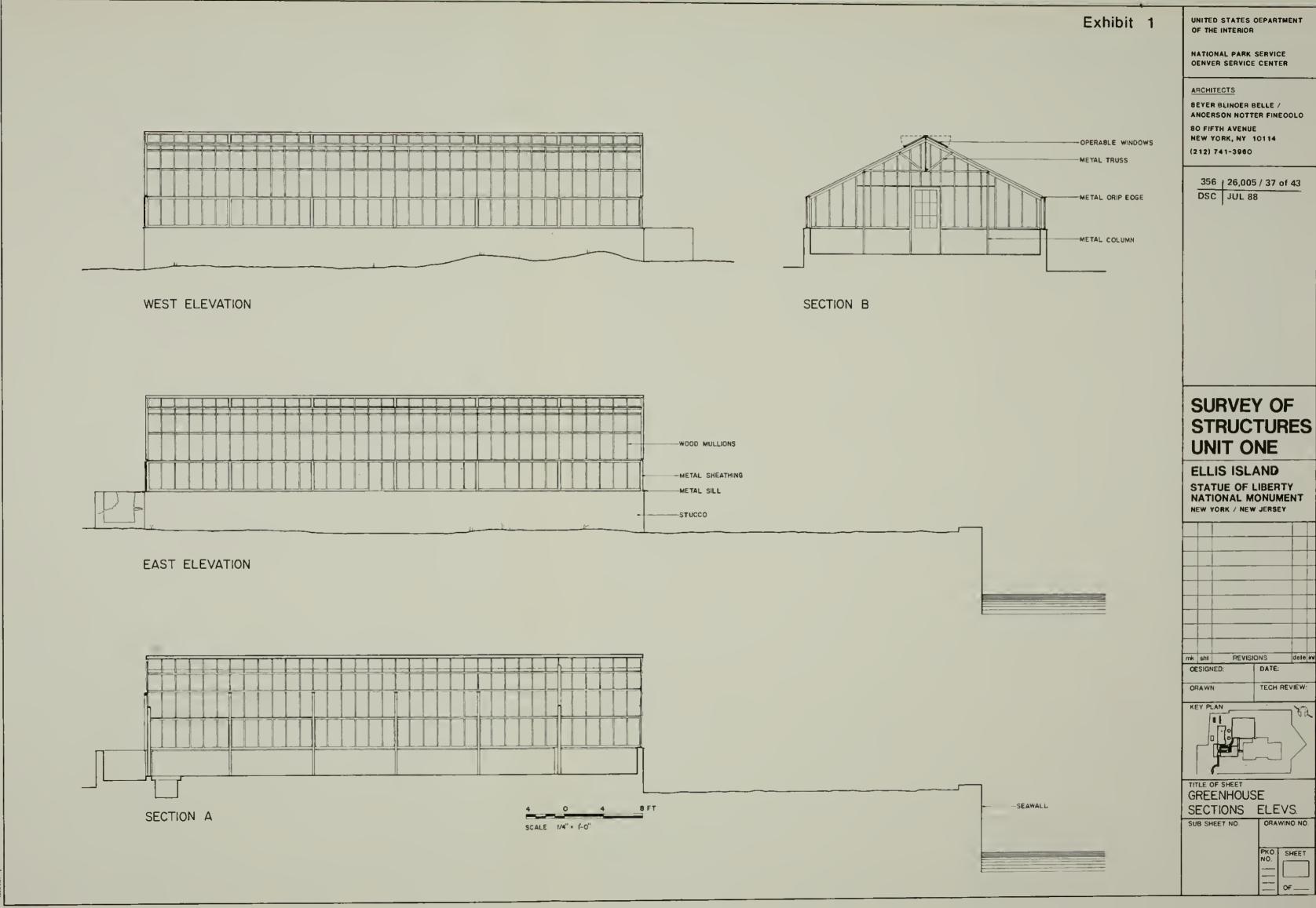
4. South end of hothouse, WWII, U.S. Immigration and Naturalization



5. Hothouse interior, WWII, U.S. Immigration and Naturalization Service.

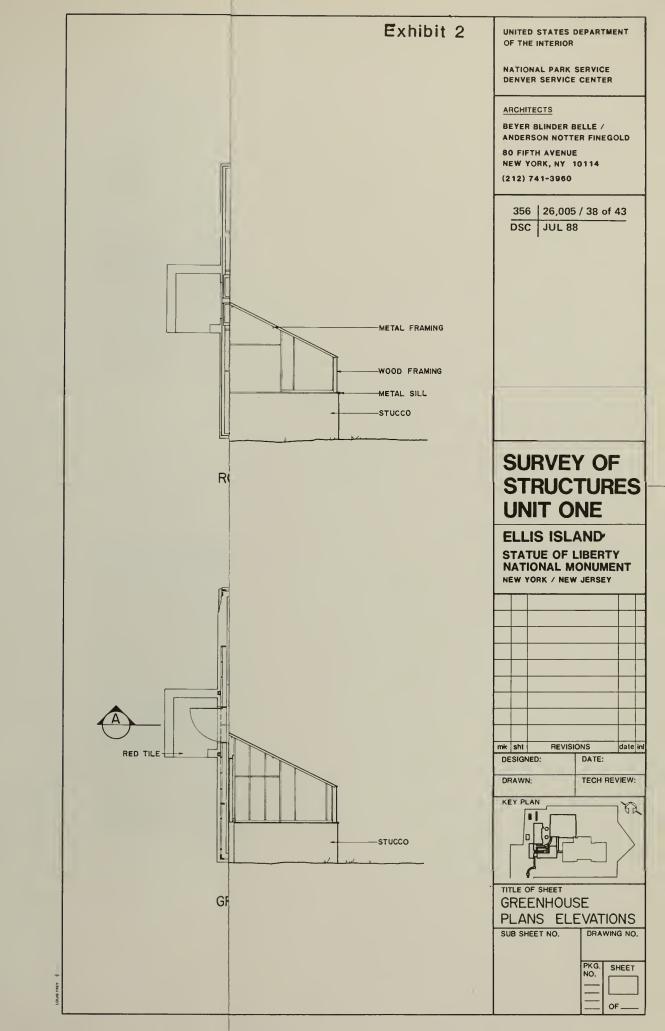


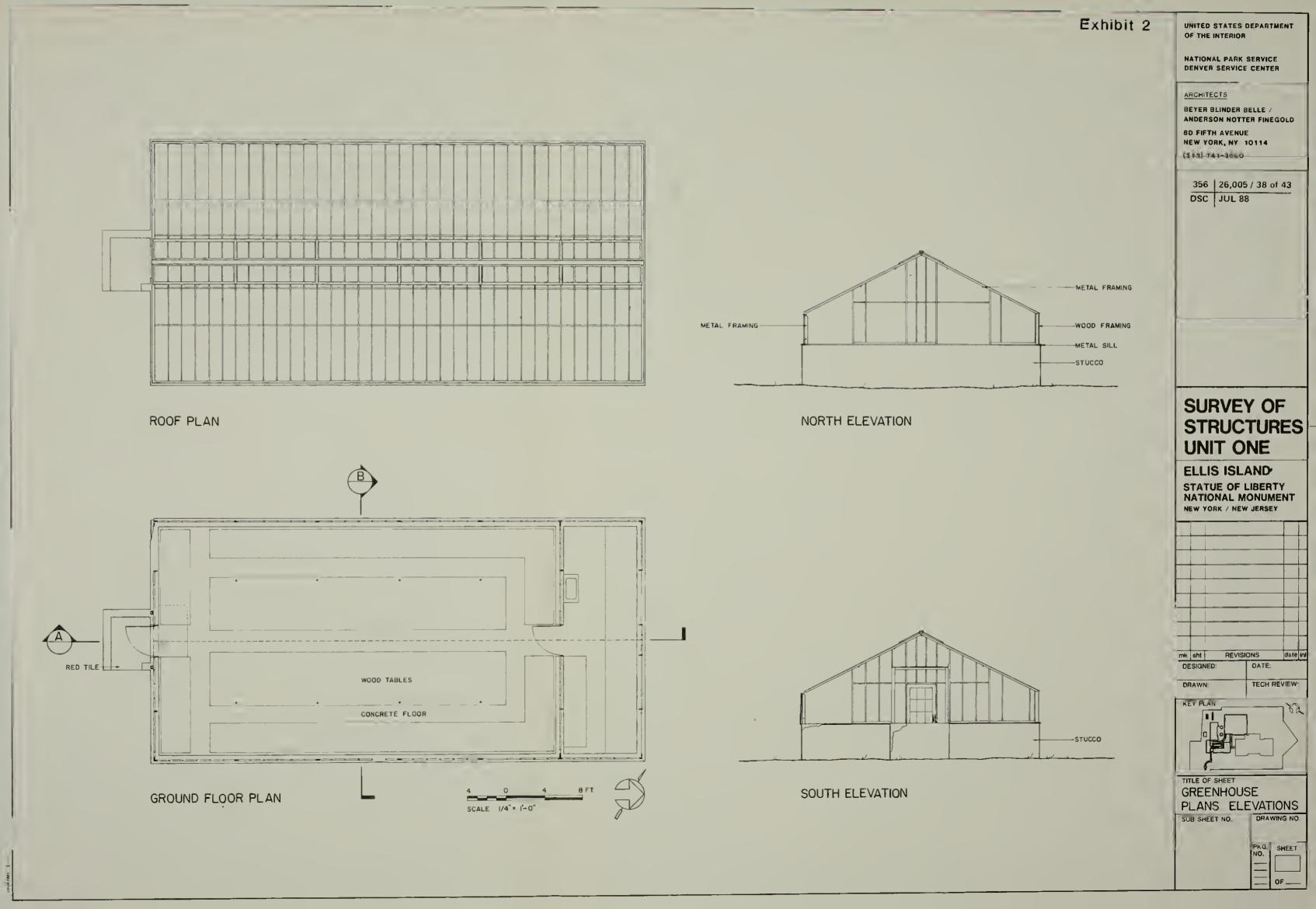




UNITED STATES DEPARTMENT

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6. South elevation, view north.



7. East elevation, view west.



8. West elevation, view east.



9. North elevation, view south.



10. South facade- entrance vestibule.



11. Interior of greenhouse, ventilator window at ridge.



12. Interior, view north.



13. North end, view east.



14. North end room, view northwest.

4. Water Tanks

a. Description and Existing Conditions⁹

Two elevated water storage tanks are located between the powerhouse and the baggage and dormitory building. They were erected in 1929 by the Pittsburgh-Des Moines Steel Company (exhibits 1 and 2). Each tank has a capacity of 300,000 gallons and a diameter of twenty-four feet (photos 1-4).

The foundations and towers were inspected for exterior conditions and the riser and tank were examined on the interior and exterior.

The concrete piers of the foundations are in very good condition with no apparent settlement. Anchor bolts are not corroded but nuts and column shoes are rust covered, with as much as 5/8" build-up on the shoes.

Fifty per cent of the towers have no paint and the remainder has rust spots. The bases of the towers have pitting and the connections of balcony and tower to tank have heavy rust build-up. The tower rods are in good condition and adjustment. Some corrosion occurs around pins and cotter pins. The tower ladders are sound but do not meet present OSHA safety regulations. A large build-up of rust occurs between the ladder bracket and lacing bars. Column splices are in good condition.

⁹Based on Pittsburgh-Des Moines Corporation, "Tank Inspection Reports - 2 Elevated and 1 Flat Bottom - Ellis Island, N.Y.," May 1984.

The two risers are aligned but the stay rods are badly deteriorated and should be replaced. There are approximately 75 holes in the north tower riser. In the south tower riser a large number of holes were found with a 6" X 15" hole below the manhole. The south riser contains 15" of rust and scale in the bottom. The metal is badly pitted and no paint remains.

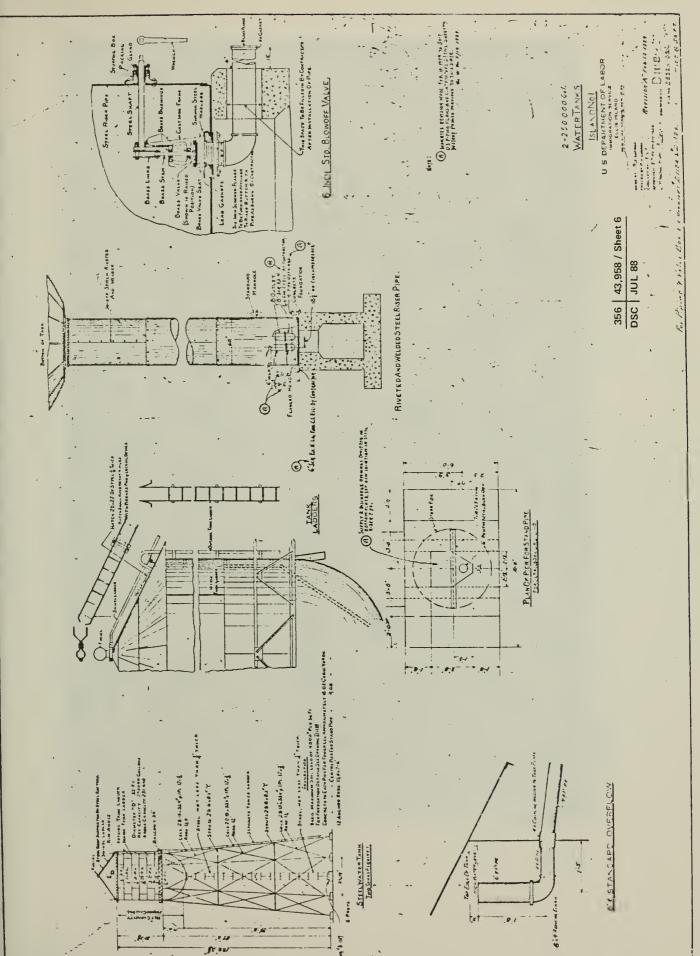
The tanks have no apparent leaks though some slight pitting does occur on the bottom of the north tank. Very little paint remains on the bottom and none is left on the remainder of the shell and the roof (photos 5-7). All six rings of the riveted shells are rusty and pitting occurs around the column connections to the shell. The metal of the bottom of the south tank is in good condition. The outside shell ladder is sound but the roof ladder of the north tank is not. On the interior of the tanks, large pits may be seen in the shell plates and the bottom is badly pitted. No paint remains on the inside. No inside ladders exist and ladder clips are badly bent.

Many holes exist in the roofs, representing a structurally unsafe condition. The finial of the north tank is not stable because most of the finial bolts are missing. The roof ladder and finial of the south tank are lying on the ground.

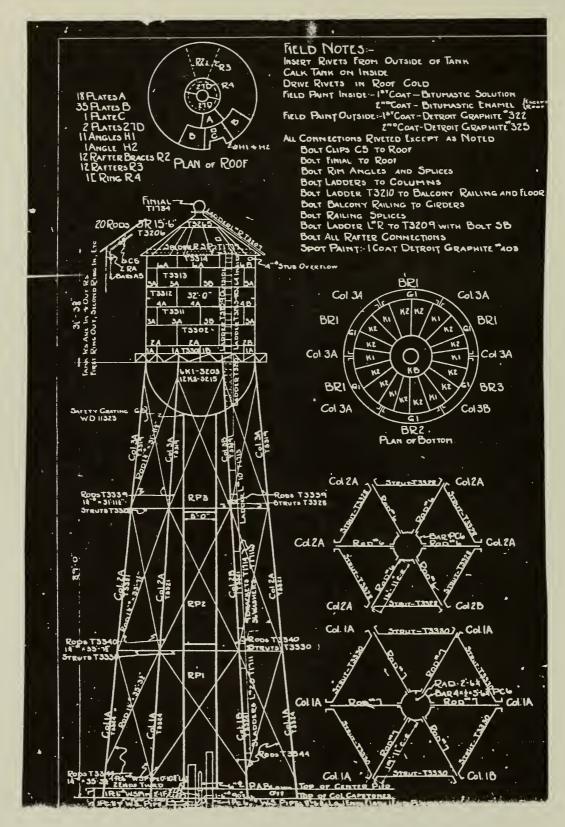
Valves of both tanks were corroded and in very poor condition. The concrete valve pit of the south tank is in danger of falling in.

b. Replacement

The tower supports, the risers, and the tanks require replacement due to their deteriorated condition and loss of structural integrity. Consequently, the architectural/engineering team, in conjunction with the National Park Service, determined that the water tanks and superstructures should be promptly removed. Demolition occurred in May 1985. The water tanks and towers will be replaced with new ones that have the same volume and general appearance as the existing tanks. They will meet O.S.H.A., N.F.P.A., and American Water Works Association Standard regulations.



Plans for water tanks, Island No. 1, 1929.



Tank and tower erection diagram, Pittsburgh-Des Moines Steel Co., 1928.



 Looking west from the roof of the baggage and dormitory building.



2. View from west side of shelter.



3. Looking north.



4. Looking south.



5. South tower.



6. South tower from roof of kitchen and laundry building.



7. North tower.

5. 0il Tank 10

a. <u>Description and Existing Conditions</u>

The reserve fuel oil tank, located to the north of the water tanks, was assembled in 1952. The 75,000 gallon capacity steel tank rests on a base of sand, gravel fill and piers of reinforced concrete (photos 1 and 2). This tank replaced the previous reserve oil tank located to the west of covered way 2 (exhibit 1). The first oil tank was an elevated steel water tank that was built in 1920 and probably converted to fuel oil storage in the 1930's (exhibit 2).

The oil tank foundation concrete is in very good condition and no settlement is apparent. The grout is good but the bottom seal is starting to deteriorate. The tank has one damp spot approximately 15 feet west of the ladder at the bottom to the foundation. Paint on the shell and roof exhibits many skipped areas. No metal pitting occurs though a slight amount of rust has built up near the ladder approximately 6" up from the foundation. The welded tank is full of fuel oil. The pipe connections are good but there is a minor leak in the pump.

b. Recommendations

Repair work for the tank would include cleaning and resealing the foundation, cleaning rust areas at the bottom, and repainting the entire tank. If the tank is taken out of phase, the bottom should be cleaned and vacuum boxed.

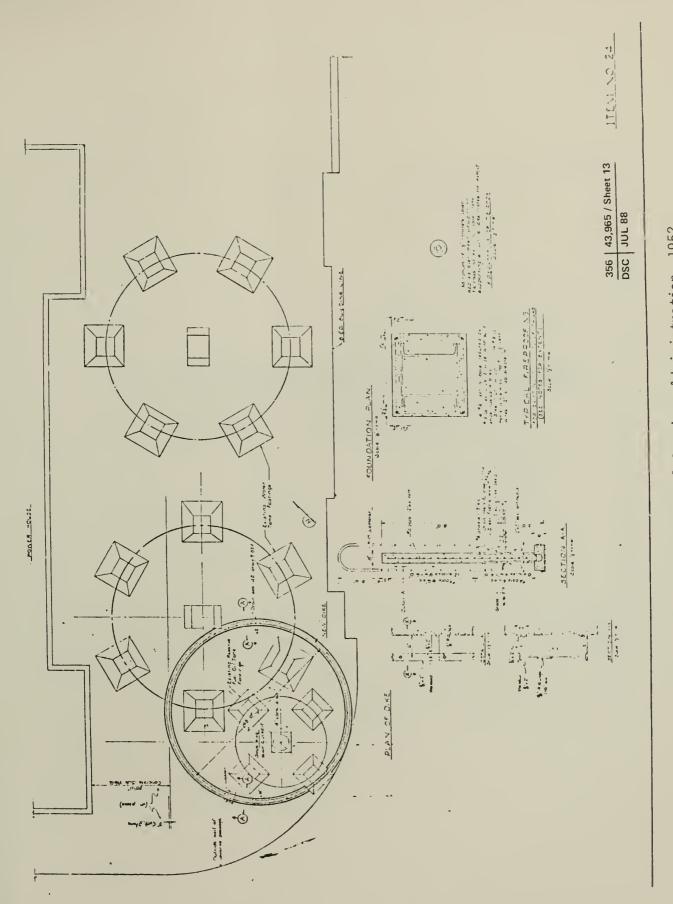
¹⁰Based on Pittsburgh-Des Moines Corporation, "Tank Inspection Reports - 2 Elevated and 1 Flat Bottom - Ellis Island, N.Y.," May 1984.



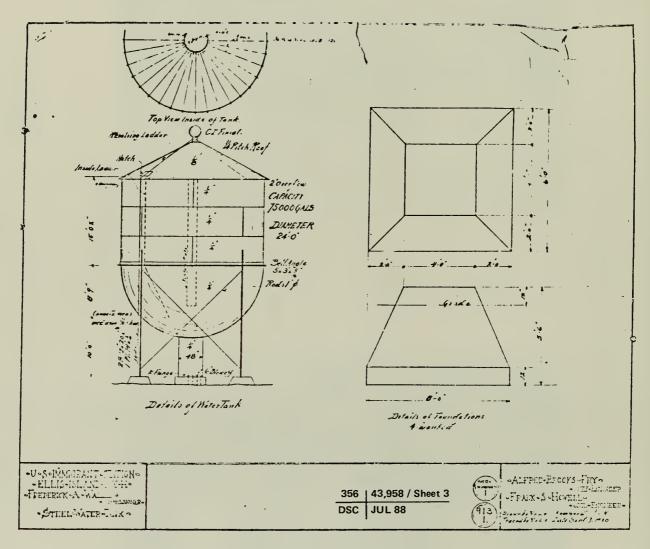
1. Oil tank, view southeast.



2. Oil tank, aerial view.



"Elimination of Fire Hazards", Drawing 7-1, General Services Administration, 1952. Footings of reserve fuel oil tank at left.



Plan for new steel water tank, 1920.

G. ARCHITECTURAL TREATMENT OF UNIT 1 BUILDINGS



1. Discussion of Use

At the present time the potential uses of the buildings in Unit One are under study. A program for the reuse of these structures is being developed by the National Park Service, the Statue of Liberty-Ellis Island Commission and Foundation, the architectural/engineering team, and the exhibition designers. Therefore, the following discussion of use is preliminary and only presents some of the programmatic needs and possibilities that are being discussed.

It is projected that 50% of the kitchen and laundry building will be rehabilitated as administrative offices for the National Park Service. The remainder of the building could potentially be used as exhibition spaces. This building is an appropriate location for the interpretation of spaces that were historically significant, most notably the dining room on the second floor. Alternatively, special galleries for temporary exhibits could be located in the kitchen and laundry building.

Current discussions are evaluating the use of the baggage and dormitory building for interpretive purposes. The theme that the exhibition designers have called "The Peopling of America" is being considered for this building. Discussion is also focusing on the construction of a 400-500-seat theater in the baggage and dormitory building which would be used for large lectures, presentations, and events. Programmatic needs will define what other uses (i.e., storage) could be located in the baggage and dormitory building.

The bakery and carpentry building will be rehabilitated for maintenance shops to service the powerhouse and the Unit One buildings.

The corridors and covered ways will be rehabilitated to once again function as a vital circulation system linking the Unit One buildings.

Further study will provide programmatic possibilities for the shelter.

The opportunities and constraints for creating museum, administrative, and support facilities are being fully considered and each decision will be made with respect to historical accuracy, thematic appropriateness, and the practicalities of converting such buildings to these uses.

2. Preservation Philosophy

Ellis Island is part of the Statue of Liberty/Ellis Island National Monument and is listed in the National Register of Historic Places. The significance of the Unit One buildings dictates that the rehabilitation be conducted with respect for the historic building fabric in strict accordance with the Secretary of the Interior's Standards for Rehabilitation and "36 CFR 800."

BBB/ANF has conducted careful analyses of the resources. Four aspects of the buildings were analyzed in detail:

- 1. Existing conditions
- 2. Historic development of existing fabric
- 3. Historic use
- 4. Architectural significance

These studies have resulted in a profound understanding of the historic, cultural, and architectural aspects of the buildings and will serve as a basis for future design decision-making. An appropriate level of intervention to the building fabric of each structure will be identified considering both the historic and architectural context, contemporary use needs, and good preservation practice.

3. Current Developments

The architectural/engineering team has been contracted develop plans for the stabilization of the Unit One buildings. Alterations to the exteriors will have a minimal visual impact on the historic appearance of the buildings. A conservation program will be developed for the exteriors which addresses the causes and effects of deterioration. Cosmetic treatment of problem areas must be preceded by repairs to roofs, gutters, flashing, and downspouts. the buildings are watertight, the program of conservation treatment can proceed. This should include the repair of stone cracks and losses, repointing of masonry, removal of black crust stains, and removal copper, iron, and efflorescence. The problems with the Unit One buildings are similar to those of the main building and the stabilization and conservation program for the main building will serve as a model and learning tool for work on the other buildings.

In support of a responsible conservation program for Unit One exteriors, an extensive structural analysis and program is scheduled. This effort will rehabilitation follow the interpretive analysis so that design and remedial efforts are effectively directed toward optimizing long qoals. not merely toward stop-gap range expenditures. The results of the ongoing exterior structural analysis will become a vital part of accumulated job record and will serve as a complement to this document.

4. Recommendations for Further Study

a. Inventory and Analysis of Inscriptions

Inscriptions (graffiti) have been found in the B & D building which represent a potential wealth of historical information. Continuation of the effort at Ellis to locate, inventory, and analyze such graffiti should be planned. In addition to its systematic documentation measures should be undertaken to further protect inscriptions from the hazards of weather, where exposed, and from debris removal and construction campaigns when they occur.

b. Future Areas of Research

Below are listed various topics which could be further explored at the Unit One Buildings.

- Industrial Archaeologic topics pertinent to the power house and laundry complexes -- processes and equipment.
- Definitive history of the U.S. Coast Guard occupation of this part of Ellis.
- Analysis of the roles and processes of various support activities such as food preparation, greenhouse, gardening, machine shops, security, heating and water supply, building maintenance, landscape maintenance, etc.
 - Subsurface Archaeology

c. H.S.R. Work for Units Two, Three, and Four

In September 1985 work on a Historic Structures Report for some twenty-three buildings on the south half of Ellis commenced. It is anticipated that this work involving mostly hospital, administrative, and ferry terminal facilities will be completed in May 1986.

H. LIST OF ILLUSTRATIONS



- Exhibit 1898 Block Plan
 - 2. 1902-1904, First Floor, Island 1, Plan of power house, covered way 5, kitchen and laundry building, and the main building.
 - 3. 1914- Island 1 Plan
 - 4. Island 1 Block Plan, First Floor 1916.
 - 5. 1932 - Roof Plans, Island 1.
 - Block Plan, relative locations of buildings on 6. the three islands, 1933.
 - 7. General Plan, first floor, 1937.
 - 8. General Plan, second floor, 1937.
 - General Plan, third floor, 1937. General Plan, roofs, 1937. 9.
 - 10.

Following Page 24

- Exhibit 1. 1899 proposal for separate buildings for "Restaurant" and "Bath and Disinfecting Building".
 - 1899 floor plan for "Restaurant" and 2. "Disinfecting Building".
 - 3. Elevations for original proposed scheme of separate "Restaurant" and "Disinfecting Building", 1899.

- Exhibit 4. Survey of structures, Kitchen and Laundry, south elevation.
 - 5. Survey of structures, Kitchen and Laundry, north elevation.
 - Survey of structures, Kitchen and Laundry, west 6. elevation.
 - Survey of structures, Kitchen and Laundry, east 7. elevation.
 - Survey of structures, Kitchen and Laundry, Roof 8. Plan.
 - 9. Elevations of "Kitchen and Laundry Building", 1900.
 - Sections of "Kitchen and Laundry Building", 10. 1900.
 - Plan of roof. 11.
- Plate
- South facade, 1901. 1.
- South facade of new kitchen and laundry 2. building and main building from across ferry slip, 1901.
- South Facade of kitchen and laundry building, 3. 1901-1912.
- 4. South facade, kitchen and laundry building, c. 1903.

- 5. South facade, kitchen and laundry building, "Taft party", 1910.
- 6. South elevation, view north.
- 7. East pavilion, south elevation, view north.
- 8. East pavilion, east elevation, view west.
- 9. West pavilion, south elevation, view north.
- West pavilion, southwest corner, view 10. northeast.
- 11. West pavilion, west elevation, view east.
- Roof, east pavilion, view south. 12.
- 13. Roof, east pavilion, east elevation, view west.
- 14. Roof, view south.
- Roof, west pavilion, view east. 15.
- 16. Dormer, east pavilion, east elevation view southwest.
- 17. Porch, south elevation, view northwest.
- 18. Porch stairs, south elevation, view north.
- 19. Porch, view west.
- 20. Second floor porch, view east.
- 21. Porch, cast-iron column with original capital.
- 22. Entrance, west end of porch, view west.
- 23. Entrance, porch, south elevation, view north.
- Entrance, porch, south elevation, view north. Entrance, porch, south elevation, view north. 24.
- 25.
- 26. Entrance, east end of porch, view east.
- Oval window, east pavilion, south elevation. 27.
- 28. East pavilion, north elevation, view south.
- 29. East pavilion, west elevation, view east.
- East pavilion, west elevation, view southeast. 30.
- 31. East pavilion, west elevation, one-story structure and basement entrance, enclosed ramp view south.
- 32. One-story structure at juncture of east pavilion and north elevation, view southeast.
- 33.
- "Ice Plant", north elevation, view west.
 "Ice Plant", north elevation, view southwest.
 "Ice Plant", south elevation, view northwest. 34.
- 35.
- 36. Enclosed ramp, east elevation, view southwest.
- 37. Enclosed ramp, west elevation, view east.
- 38. "Ice Plant" and corridor to Bakery and Carpentry Building, view east.
- "Ice Plant" and corridor, view south. 39.
- 40. West end of corridor to bakery and carpentry building, view south.
- 41. North elevation and corridor to bakery and carpentry building, view east.
- 42. Window, corridor to bakery and carpentry building.
- 43. Connector between kitchen and laundry building and covered way 5, view north.
- 44. Exfoliation, bluestone window sill, south elevation.

- 45. Mortar loss and surface spalling, south elevation.
- Hole in brick, east pavilion, north elevation. Iron staining, west end of porch. 46.

47.

- 48. Roof tiles, gutter, west pavilion, northwest corner, view east.
- Gutter, juncture of east pavilion and north 49. pavilion, view southeast.
- 50. Gutter, cast-iron capital; south elevation, view north.
- 51. Porch, view northwest.
- 52. Porch, view north.
- 53. Porch stairs.
- 54. Window, south elevation.
- Corridor from kitchen and laundry to bakery and 55. carpentry. (Hall 201).
- Window lintel, "Ice Plant", north elevation. Masonry, "Ice Plant", north elevation. 56.
- 57.
- 58.
- Window frame, "Ice Plant", north elevation. Counterweights, "Ice Plant", north elevation. 59.

- Exhibit 12. Survey of Structures, Kitchen and Laundry, Basement Plan.
 - 13. Survey of Structures, Kitchen and Laundry, First Floor Plan.
 - Survey of Structures, Kitchen and Laundry, 14. Second Floor Plan.
 - 15. Survey of Structures, Kitchen and Laundry, Section B-B.
 - 16. Survey of Structures, Kitchen and Laundry, Section A-A.
 - First Floor Plan. 17.
- Plate Photo of immigrants employed in kitchen, Dec. 17, 1901. 1.
 - 2. Immigrants working in kitchen, Dec. 18, 1901.
 - 3. Room 118, dining room, looking toward northeast corner, c. 1901-1908.
 - Room 118, dining room, view northwest corner, 4. c. 1901-1908.
- Exhibit 18. Portion of Block Plan, 1916.
 - 19. K and L Building, 1935.
 - 20. Roof Plans for Island #1, 1932.
- Plate 5. Room 118-dining room, southeast corner.
 - Room 118, northeast corner. 6.
 - Room 117, toward southeast corner. Room 117, toward northwest corner. 7.
 - 8.
 - 9. Room 117-looking west toward dining room.
- Exhibit 21. Survey of Structures, Kitchen and Laundry, First Floor Plan. Historical Development.
 - 22. Survey of Structures, Kitchen and Laundry, First Floor Plan. Room Uses.

- "Kitchen and Restaurant: and "Bath House and 23. Laundry Building", Unfinished second floor, 1900.
- 24. Kitchen and Restaurant" and "Bath and Laundry", plan for four dormitories on second floor, 1901.
- 25. Portion of 1916 plan.
- Portion of 1927 plan. 26.

Plate

- 10. Room 201, c. 1907-08.
- 11.
- Room 201, toward east wall, c. 1910. Room 201, "Immigrants Dining Room, c. 1910. 12.
- 13. Room 202-view northwest, c. 1910.
- 14. Room 201-view north, c. 1910.
- 15. Room 201-view west, c. 1910.
- Room 201-south wall of dining room. c. 1920 s. 16.
- 17. Room 201-view toward southwest corner, c. 1920 s.
- 18. Room 201, view north, "Jewish passover seder", 1920/
- 19. Postcard, ca. 1925. Dining Room.
- 20. Room 203-view southwest, WWII.
- 21. Room 203, view of east wall. WWII.
- 22. Room 203-west wall of partitioned room, WWII.
- 23. Room 203-view of southwest, c. 1950 s.
- 24. Room 203-view northwest. Immigration classes, c. 1950 s.
- Exhibit 27. Survey of Structures, Kitchen and Laundry, Second Floor Plan, Historical Development.
 - 28. Survey of Structures, Kitchen and Laundry, Second Floor Plan, Historical Development.
 - 1926 Details of installation of refrigerating 29. unit in basement, kitchen and laundry building.
- Plate 25. Room 115-west wall panel.
 - 26. Detail of mural.
 - 27. Room 111.
 - 28. Room 101.
 - 29. Room 106.
 - 30. Hallway 105.
 - 31. Room 118.
 - 32. Room 202, floor.
 - 33. Room 203.
 - 34. Hallway 201.
- Exhibit 30. Existing Condition Survey
 - Existing Condition Survey 31
 - Existing Condition Survey 32.
 - Survey of Structures, Kitchen and Laundry First 33. Floor Plan, existing conditions
 - Survey of Structures, Kitchen and Laundry 34. Second Floor Plan, existing conditions.
- Room 201. Plate 35.
 - Room 119. 36.
- Exhibit 35. Survey of Structures, Kitchen and Laundry First Floor Plan, Architectural Significance.

36. Survey of Structures Kitchen and Laundry Second Floor Plan, Architectural Significance.

Following Page 52

Plate 1.

Chain-suspended RLM with globe, c. 1935.

2. Ceiling mounted RLM-type, room 111.

3. Partition-mounted counter lamp, room 119.

4. Double lamp ceiling mount, H104.

5. Glass globe, second floor. 6.

Glass globe, second floor. 7. Sectional radiator, H201.

- 8. Sectional wall-mounted radiator, room 119.
- 9. Wall-mounted rotary fan, room 119. 10. Laundry room copper exhaust hood.

Exhibit 37 Plumbing details, 1900.

Plate

- 11. Urinal, sinks, slop sink, room 204.
 - 12. Toilet and urinal room 102.
 - 13. Shower, room 113.
 - 14. Elevator door, H105.

Following Page 55

Exhibit 38. Floor in room 177, 1903.

Plate

- 1. South facade, gutter and cornice.
- 2. North facade, gutter and cornice.
- 3. North facade, western end, cornice.
- 4. South porch, steel supports and I-beams.
- 5. South porch, roof beams at second floor level.
- 6. Northeast corner of basement ceiling, steel beams.
- 7. Steel beam under first floor construction.
- Room 201, white ceramic tile. 8.
- 9. North wall plaster, H201.
- Corrosion, north wall H201. 10.

Following Page 58

Exhibit 39. Plans for ammonia unit. 1935.

Assembly plans for ammonia unit, 1945. 40.

Plate

- 1. Washing machine, Room 111. WWII.
- 2. Room 111-view northwest, washing and pressing machine, WWII.
- Room 111, view south, WWII. 3.
- Room 111, view southwest, WWII 4.
- 5. Room 111, view northwest, WWII.
- 6. Room 111, "American Humatic Extractors".
- Room 111, "American Humatic Extractors". 7.
- 8. "Humatic Extractor" left.
- 9. "Humatic Extractor" right.
- 10. Room 111, north wall, "The American Machinery Co."
- 11. Eastern machine of above.

- 12. Room 111, engine above washing machine.
- 13. Room 111, west end of washing machine.
- Room 111, north wall, "Holl-Man, Patented-Klear-Buk". 14.
- 15. Pressing table with floor operating pedal.
- Room 111, "Smith-Drum, Phil. Pa.". 16.
- 17. Front view, "Smith-Drum".

- Plate Dining hall, mural series, west walls, ca. 1. 1938-49.
 - Scene of pioneers in covered wagons, 1935-38. 2.
- Sketch, "The Building of the Pacific Railway". Exhibit 41.
- Artists and assistants working on "The 3. Plate Building ... ".
 - 4. Detail, "The Building of the Pacific Railway", ca. 1938.
 - 5. View of the dining hall, west wall, c. 1970.
- Sketch for "Lumbering in the Northwest." Exhibit 42.
- Plate 6.
- "Lumbering in the Northwest", ca. 1938. Sketch for scene of the steel industry. Exhibit 43.
- Artist painting the scene of the steel Plate 7. industry.
- Exhibit 44. Sketch for "Arrival of Central European Immigrants".
- Artist painting "Arrival of Central European Plate 8. Immigrants".
 - 9. "The Building of the Pacific Railway".
 - 10. "Lumbering in the Northwest", "Arrival of Central European Immigrants".
 - View of the mural in courtroom #3. 11.
 - 12. View of the mural in courtroom #3.
 - 13. Indian and farmers, missing in pioneer scene.
 - 14. Indian.
 - 15. Farmers harvesting wheat.
 - 16. "The Building of the Pacific Railway."
 - 17. Farmers harvesting wheat.
 - 18.
 - Detail, "Building of the ..."
 Detail, "Building of the ..."
 Detail, "Building of the ..." 19.
 - 20.
 - "Building of the ..." Detail, 21.
 - Detail, "Building of the ..." 22.
 - 23.
 - Detail, "Building of the ..."
 "The Building..." at left; steelmaking scene at 24. right.
 - 25.
 - Steelmaking, detail.
 Portion of "Arrival of Central European 26. Immigrants".
 - 27. "Arrival of Central European Immigrants".
 - Detail, "Arrival of Central European 28. Immigrants".

- 29. Detail, "Arrival of Central European Immigrants".
- 30. Woman looking out window, Lower East Side.
- 31. Mural mounting.

- Fxhibit 1. Proposed crib reconstruction, 1904.
 - 2 Proposed extensions, 1904.
 - 3. Initial proposal for new building, 1906.
 - 4. Plan of New Building, 1907.

- Exhibit 5. Baggage and Dormitory Buildings, West Elevation.
 - 6. Survey of Structures, Baggage and Dormitory, North Elevation.
 - 7. Survey of Structures, Baggage and Dormitory, Section D-D.
 - 8 This drawing not used.
 - 9 Survey of Structures, Baggage and Dormitory, East Elevation.
 - 10 Baggage and Dormitory Building, South Elevation.
- Plate 1. East wall of baggage and dormitory building, c. 1910.
- Exhibit 11. Elevations.
 - 12 Elevations.
 - 13. Plan of Present Roof Garden to be Removed.
- Plate 2. Additional story of baggage and dormitory building, 1913.
- Exhibit 14. Northeast elevation.
 - Metal and Masonry Projection, Section AB, 15. Southeast Elevation.
 - 16. Roof Plan.
- Plate 3. East and north elevations, view southwest.
 - 4. East elevation, view west.
 - 5. South elevation, view north.
 - 6. South elevation, east side, view northeast.
 - 7. South elevation, east side, stair.
 - 8. Southwest corner, view northwest.
 - 9. South elevation, west side, view north.
 - 10. Original exterior walls, room 122.
 - Original exterior wall, room 123. 11.
 - 12. Original exterior wall, room 210.
 - Northeast corner, view southwest. 13.
 - 14. North elevation, east end, view south.
 - North elevation, central section, view south. North elevation, west end, view south. 15.
 - 16.
 - First floor window, north elevation. 17.
 - Second floor, east elevation, north projection. 18.
 - Second floor window, north projection. 19.

- 20. Railing, north projection.
- 21. Chain linked fence and barbed wire, north projection.
- 22. Entrance, east elevation.
- 23. East entrance, north elevation.
- 24. Central entrance, north elevation.
- 25. West entrance, north elevation.
- 26. Entrance, west elevation.
- 27. Entrance, southwest corner.
- 28. Southwest entrance, view northwest.
- 29. Stair, east elevation, view west.
- 30. Light court, view east.
- 31. Roof, view east.
- 32. Roof, view northeast.
- 33. Fan houses on roof, view west.
- 34. Roof porch at north projection, view east.
- 35. Disinfecting plant, west elevation, view east.
- 36. Disinfecting plant, north elevation, view west.
- 37. Disinfecting plant, north elevation, view south.
- 38. One-story corridor, shed.
- 39. Shed, south elevation, east side, view north.
- 40. Cornice, east elevation.
- 41. Cornice, south elevation, west side.
- 42. Northwest corner, view southwest.
- 43. Central entrance, north elevation.
- 44. Cornice, north elevation.
- 45. Base, north elevation.
- 46. Base, north elevation.
- 47. Efflorescence, south elevation.
- 48. Staining, southwest corner.
- 49. Black crust on second story cornice.
- 50. Missing copper cheneaux, north elevation.

- Exhibit 17. Survey of Structures, Baggage and Dormitory, First Floor Plan.
 - 18. Survey of Structures, Baggage and Dormitory, Second Floor Plan.
 - 19. Survey of Structures, Baggage and Dormitory, Third Floor Plan.
 - 20. Baggage and Dormitory, Interior "As Found", Section "A" (Longit.).
 - 21. Baggage and Dormitory, Interior "As Found", Section "B" (Longit.).
 - 22. Baggage and Dormitory, Interior "As Found", Section "C" (Longit.).
 - 23. Baggage and Dormitory, Interior "As Found", Section "E" (Transverse
 - 24. Baggage and Dormitory, Interior "As Found", Section "F" (Transverse).

- Baggage and Dormitory, Interior "As Found", 25. Section "G" (Transverse).
- 26. Baggage and Dormitory Building, First Floor Plan, 1907.
- Plate 1. Room 103, view toward west end, c. 1910.
 - 2. Room 103, view toward southwest corner. 1914.
- Exhibit 27. "Island #1 Block Plan, First Floor", June 1916.
- Room 103, view southwest, ca. 1925 Plate 2A.
 - 3. Postcard, Railroad Waiting Room, ca. 1925.
- Exhibit 28. Repairs, Alterations, Additions, Baggage and Dormitory Building, 1924.
 - 29. Electrical Installations, Island No. 1, First Floor 1929.
 - 30. First Floor Plan, February 1935.
 - 31. "General Plan of Manifest Copy Room-First Floor, 1935.
- Plate 4. Porch area, room 124, 1954.
- Exhibit 32. Survey of Structures, Baggage and Dormitory, First Floor Plan, Historical Development.
 - Survey of Structures, Baggage and Dormitory, 33. First Floor Plan, Room Uses.
 - 34. Second Floor Plan, 1907.
 - 35. Second Floor Plan Showing Family Rooms, 1907.
 - 36. Second Floor, Main Island, Minor Alterations, 1916.
 - Second Floor Plan, Island #1, Door and Window 37. Repairs, 1939.
 - 38. Survey of Structures, Baggage and Dormitory, Second Floor Plan, Historical Development.
 - 39. Survey of Structures, Baggage and Dormitory, Second Floor Plan, Room Uses.
 - "Sections of Completed Building--Additional 40. Story of Baggage and Dormitory Building", 1913.
 - 41. "Third Floor Plan", 1913.
 - Third Floor, Minor Alterations, 1917. 42.
 - 43. Electrical Installations, Third Floor, 1929.
 - 44. Repairs, Alterations, Additions, Third Floor,
- Plate 5. Room 315, View northeast wall, late 1940 s
 - Room 315, View northeast, 1931. 6.
 - 7. Room 324, northeast corner, 1947.
- Survey of Structures, Baggage and Dormitory, Exhibit 45. Third Floor Plan, historical development.
 - 46. Survey of Structures, Baggage and Dormitory, Third Floor Plan, Room Uses.
- Plate Room 114, finishes. 8.
 - 9. Room 108, finishes.
 - Room 123, porch area looking southwest. 10.
 - Room 122, grille enclosure. Room 112, looking south. 11.
 - 12.
 - 13. Room 113, looking south.
 - 14. Room 212, view southwest.

- 15. Room 210, view east.
- 16.
- Room 324, view southwest.
 Room 311, "Disinfecting Department". 17.
- Painted circle around bare lamp, room 316. 18.
- Painted circle around bare lamp, room 306. 19.
- Exhibit 47. Survey of Structures, Baggage and Dormitory, First Floor Plan, Existing Conditions.
 - Survey of Structures, Baggage and Dormitory, 48. Second Floor Plan, Existing Conditions.
 - 49. Survey of Structures, Baggage and Dormitory, Third Floor Plan, Existing Conditions.
- Plate 20. Room 322, wash room.
 - Room 212, southwest corner. 21.
 - Hallway 201. 22.
- Survey of Structures, Baggage and Dormitory, Exhibit 50. First Floor Plan, Architectural Significance.
 - Survey of Structures, Baggage and Dormitory, 51. Second Floor Plan, Architectural Significance.
 - 52. Survey of Structures, Baggage and Dormitory, Third Floor Plan, Architectural Significance.
- Plate 23. Room 124, northeast corner, navigational coordinates chart.
 - 24. Close up of above.
 - 25. Room 124, northwest corner, compass painted on wall.
 - 26. Close-up of above.
 - 27. Room 124, south wall, signal flags.
 - 28. Room 124, south wall, signal flags.
 - Room 123, south wall, signal flags. 29.
 - 30. Room 123, south wall, signal pennants.
 - 31. Room 123, southwest corner, signal flags. 32. Room 122, east wall, signal flags and pennants.
 - 33. Room 122, south wall, signal pennants.
 - Room 211, south wall, graffiti. 34.
 - 35. Room 211, south wall Italian and English graffiti.
 - 36. Room 211, south wall graffiti.
 - 37. Room 211, south wall graffiti, close-up.

- Exhibit 53. Drawing for holphane lighting, 1913.
 - 54. Drawing for outside wrought iron lighting, 1913.
- Plate Type A, suspended glass globe, room 212, ca. 1. 1924.
 - Type A, Room 204, ca. 1924. 2.
 - Type A, Room 201, ca. 1924. 3.
 - Type B-RLM fixture, chain suspended, room 103, 4. ca. 1934.
 - 5. Type B-RLM fixture, on drop cord, room 112, ca. 1934.

- 6. Type B-RLM fixture, with blue tinted globe lamp, ca. 1939.
- 7. Type B-RLM fixture, on drop cord, room 124, ca. 1935.
- 8. Type-C porcelain socket with metal housing.
- 9. Type-C chain suspended lamp, room 107, ca. 1950.
- 10. Type C- "Vaportight"fixture, room 122, ca. 1935.
- 11. CML-bare lamp in porcelain socket set in metal housing.
- 12. Conduit mounted housing with lamp.
- 13. Wall-mounted radiator, ca 1909.
- 14. Wall-mounted radiator, room 322.
- 15. Typical sectional radiator, room 103, ca. 1909.
- 16. Typical sectional radiator, room 307, ca. 1909.
- 17. Exposed steam pipe cluster, ca. 1914.
- 18. Wall-mounted propeller fan, room 103.
- 19. Wall-mounted propeller fan.
- 20. Window fan, room 110, ca. 1939.
- 21. Ceiling register to roof ventilator, ca. 1934.

Exhibit 55. "Typical plumbing details", 1924.

Urinal, Room 320

Plate

22.

- 23. Urinal, Room 213, ca. 1920 s
- 24. Wall-mounted urinal, room 109, ca. 1939.
- 25. Typical toilet, room 109, ca. 1939.
- 26. Typical pedestal sink installed between 1900-1924, room 204.
- 27. Typical pedestal sink, room 317, ca. 1930 s.
- 28. Freestanding attached sinks and drinking fountain, room 322, ca. 1932.
- 29. Porcelain drinking fountain, room 317, ca. 1932.
- 30. Slop sink, room 203.
- 31. Slop sink, room 108.
- 32. Porcelain slop sinks, room 207.
- 33. Slop sink, room 303.
- 34. Bathtub and shoer head, room 309.
- 35. Freestanding bathtub, room 305, ca. 1924.
- 36. Aluminum partitions and tile floor and walls of showers, room 317, 1932.
- 37. Aluminum enclosed shower room 207, 1935.
- 38. Aluminum stall-less shower, room 110, 1939.

- Plate
- 1. First floor ceiling.
- 2. Room 112, corroded beams.
- 3. Room 103, cracking in floor tile.
- 4. Second floor hung ceiling.
- 5. Room 209, reinforcing.

PART TWO

Following Page 95

Building Plan for Bakery and Carpentry Exhibit 1. Building, 1914.

Following Page 98

- 2. Survey of Structures, Bakery and Carpentry, West and North Elevations.
- 3. Survey of Structures, Bakery and Carpentry, South and East Elevations.
- 4. Survey of Structures, Bakery and Carpentry, Roof Plan.
- 5. Northwest, southeast elevations.
- Southwest elevation and two sections, 1914. 6.
- 7. Plan of roof and covered way, 1914.

Plate

- 1. West and south elevations, oven room, view northeast.
- 2. South elevation, oven room, view northeast.
- 3. West elevation, view east.
- 4. North elevation, view north.
- East elevation, view northwest. 5.
- 6. East elevation and roof, view west.
- 7. Missing downspout, brick, west elevation.
- Foundation crack, west elevation. 8.
- 9. Crack at lintel level, west elevation.
- Spalling at lintel, west elevation. 10.
- 11. Limestone water table damage.
- 12. Limestone window sill joints.
- 13. Windows, west elevations.

- Survey of Structures, Bakery and Carpentry, Exhibit 8. First Floor Plan.
 - Survey of Structures, Bakery and Carpentry, 9. Second Floor Plan.
 - Bakery and Carpentry Building Interior, "As 10. Found" Drawing, Sections. Room 101, south tiled wall.
- Plate
- 1.
- 2. Room 203, view of southwest corner, machine shop and repair shop.
- Portion of Drawing, "Electrical Installations, Exhibit 11. Island 1", 1927.
- Plate 3. Room 203, view of south wall. WWII.
- Exhibit 12.
 - First Floor Plan, 1914.
 - Second Floor Plan, 1914. 13.
 - 14. First Floor Block Plan of 1916.
 - 15. Survey of Structures, Bakery and Carpentry First Floor Plan, historical development and room use.

- 16. Survey of Structures, Bakery and Carpentry Second Floor Plan, historical development and room use.
- Plate 4. Room 104, bake shop, looking west.
 - 5. Room 101, south wall, oven loading hoods.
 - 6. Room 102, lumber store room.
 - 7. Room 203C, wood partitions forming office.
- Exhibit 17. Survey of Structures, Bakery and Carpentry, First Floor Plan, Existing Conditions.
 - 18. Survey of Structures, Bakery and Carpentry, Second Floor Plan, Existing Conditions.
- Plate 8. Room 203, storage platform.
 - 9. Room 202.
- Exhibit 19. Survey of Structures, Bakery and Carpentry, First Floor Plan, Architectural Significance.
 - 20. Survey of Structures, Bakery and Carpentry, Second Floor Plan, Architectural Significance.

- 1. RLM-type fixture, c. 1935, room 103.
- 2. Porcelain socket ceiling mounted lamp, room 101.
- Exhibit 21. Second Floor Wiring Plan and Corridor Plan, 1914.
- Plate 3. Sectional radiator on pads, c. 1915, room 101.
 - 4. Wall-mounted slop sink, c. 1940 s, room 203.
 - 5. Pedestal sink, shower, room 202.
 - 6. Elevator car at first floor hoistway entrance.
 - 7. Elevator entrance at second floor.

Following Page 107

- Plate 1. Crack in underside of second floor slab.
 - 2. Crack at northwest corner of room 101.
 - 3. Crack, room 101.
 - 4. Crack, west wall, second floor.
 - 5. Crack along second floor window tops, west elevation.
 - 6. Crack, north elevation, near covered way 5.

- Exhibit 1. First floor, Block Plan of 1916.
- Plate 1. South elevation, view north.
 - 2. North elevation, view south.
- Exhibit 2 Survey of Structures, Corridor One, Elevations and Sections.
- Plate 3. North elevation and roof, view southeast.
 - 4. Efflorescence, south elevation.
 - 5. Efflorescence, north elevation at juncture with main building.

- Staining, north elevation at juncture with 6. corridor 2.
- Exhibit Plate
- Survey of Structures, Corridor One, Plans. 3
- First floor of C-1, looking east to main 7. building.
- 8. Second floor of C-1, looking west.
- Wainscot on second floor of C-1. 9.

- Room 301, Corridor 2, children in classrooms. Plate 1.
 - 2. East elevation, view southeast.
 - West elevation, north end, view east.
 - 4. West elevation, south end, view southeast.
 - 5. Roof, view south.
 - 6. North entrance, west elevation, view east.
 - 7. South entrance, west elevation, view east.
- Survey of Structures, Corridor 2, West Exhibit 1. Elevation.
 - 2. Survey of Structures, Kitchen and Laundry, East Elevation.
- Plate 8.
- Room 105, looking south.
 Mezzanine level of first floor, C-2. 9.
 - 10.
 - Second floor of C-2, looking north. Third floor of C-2, looking north. 11.
- 3. Survey of Structures, Corridor 2, Floor Plans. Exhibit
 - Survey of Structures, Corridor 2, Floor Plans. 4.
 - 5, Survey of Structures, Corridor 2, Sections.
- Room 104. 12. Plate
 - 13. Room 101.
- Survey of Structures, Corridor 2, Floor Plans, Exhibit 6. Existing Conditions.
 - 7 Survey of Structures, Corridor 2, Floor Plans, Existing Conditions.
- Plate 14. Room 103.
 - 15. Room 102.
 - Cracking and spalling, west facade of C-2. 16.
 - 17. Ceiling and wall cracks, second floor of C-2.

- Plate View looking east toward covered stairway (C-1. 3).
 - View of stair looking west toward platform form 2. first floor.
- 1 Covered stair 3, 1924. Exhibit
- East side of stair. Plate 3.
 - View north to baggage and dormitory building 4. vestibule.
- Survey of Structures, Corridor 3, Section and Exhibit 2. Elevations.
 - 3 Survey of Structures, Corridor 3, Plans.

Plate 5. Corrosion on top of bottom flange of channel at platform.

Following Page 123

Plate 1. C-4 looking west from third floor of C-2.

2. East wall of C-4.

3. C-4, view north.

4. C-4, view south.

5. C-4, view east toward curving portion.

6. C-4, west interior wall with brick filled-in arches.

Exhibit 1. Survey of Structures, Corridor 4.

2. Survey of Structures, Bakery and Carpentry, West and North Elevations.

3. Covered way 4, new concrete ceiling slab, 1934.

Plate 7. C-4, cracks in ceiling.

8. C-4, separation at mortar joints on east wall.

Following Page 128

Plate 1. Covered way #5, 1909.

2. Covered way #5, 1909-12.

Exhibit 1. Plan for covered way 5, 1901.

2. Plan of Covered Passage of Ferry Building.

3. Covered way 5, roof, sections, and elevations for new addition, 1934.

Plate 3. C-5 at left; south wall of enclosed stairway; view north.

4. East elevation, view west.

5. North section of east elevation, view west.

6. West elevation, view east.

7. North section of west elevation, view east.

8. Northeast pavilion, view north.

9. Southwest pavilion, view west.

10. Gabled projection north of pavilion, west elevation.

Exhibit 4. Survey of Structures, Corridor 5, West and East Elevations.

5. Survey of Structures, Corridor 5, Roof Plan

Plate 11. Missing brick at corner of window sill, northeast pavilion.

12. Crumbling brick, east elevation of C-5 adjacent to powerhouse.

13. Exposed corroding beam.

14. Two arches at northern end of east elevation.

15. West elevation, rotting, broken, and missing windows.

16. Detail of above.

17. West elevation, downspout.

- 18. Torn flashing, west elevation.
- Exhibit 6. Survey of Structures, Corridor 5, First Floor Plan.
 - 7 Bakery and Carpentry, South and East Elevation.

Plate 19. C-5, looking north to powerhouse.

- 20. C-5 northern section, looking toward entry to powerhouse.
- 21. Western half of C-5, room 107.
- Exhibit 8 Survey of Structures, Corridor 5, First Floor Plan, Existing Conditions.
- Plate 22. Sectional Radiator, room 103.
 - 23. RLM-type fixture, typical in western rooms.
 - 24. C-5, transverse ceiling slab cracks.

Following Page 133

Plate

- 1. C-6, west facade.
- 2. C-6, west facade, view from courtyard.
- 3. C-6, north facade, view south.
- 4. C-6, roof, view east.

Exhibit Plate

- 1 Corridor 6, "As Found" Drawings. 5. View toward southwest corner.
- View toward southwest corner.View toward northeast corner.
- 7. View of southeast corner.
- 8. Northeast corner inside ticket office.

Following Page 139

Exhibit

- 1. Plans for original garbage and refuse crematory, 1901.
- 2. "Details of Furnace--Proposed New Crematory", 1911.
- 3. "Sheet Metal Extension to Garbage Incinerator Building," 1937.
- 4. Metal baler replacement parts, 1937.
- 5. Survey of Structures, Incinerator sections and elevations.
- 6. Survey of Structures, Incinerator Plans, Furnace elevations.

Plate

- 1. South and west facades of incinerator with enclosure wall.
- 2. South and east facades, smokestack, view northwest.
- 3. East elevation, view west.
- 4. North elevation, view south.
- 5. West elevation, furnace, view east.
- 6. Entrance, south elevation, view north.
- 7. Cracking and spalling at east elevation.
- 8. Severe cracking, south elevation.
- 9. View north from entry of incinerator.
- 10. Front of eastern incinerator.

- Exhibit 1. Original plans for Shelters No. 1 and 2, 1935.

 Plate 1. Recreation shelter built between Islands #2 and #3, 1938.
- Exhibit 2. Survey of Structures, Shelter Building Elevations.
 - 3 Survey of Structures, Shelter Building, Plans and Sections.
- Plate 2. East and north elevations, view southwest.
 - 3. North elevation, view south.
 - 4. West elevation, view northeast.
 - 5. South elevation, view northeast.
 - 6. Bulls eye window.
 - 7. Hole and spalling, west elevation.
 - 8. Room 103, view of northwest corner.
 - 9. Room 102, view south.
 - 10. Galvanized metal door to room 103, solitary confinement.
 - 11. Room 103, calendar on wall.
 - 12. Room 102, wall-mounted radiators.
 - 13. Room 103, view east.
 - 14. Room 1032, view west.

Following Page 146

- Plate 1. First greenhouse, ca. 1910.
 - 2. South end of greenhouse, WWII.
 - 3. South end of greenhouse.
 - 4. South end of hothouse.
 - 5. Hothouse interior, WWII.
- Exhibit 1. Survey of Structures, Greenhouse, Sections and Elevations.
 - 2. Survey of Structures, Plans and Elevations.
- Plate
- 6. South elevations, view north.
- 7. East elevation, view west.
- 8. West elevation, view east.
- 9. North elevation, view south.
- 10. South facade, entrance vestibule.
- 11. Interior of greenhouse.
- 12. Interior view north.
- 13. North end, view east.
- 14. North end room view northwest.

- Exhibit 1. Plans for water tanks, Islands #1, 1929.
 - 2. Tank and tower erection diagram, 1928.
- Plate 1. Looking west from the roof of the Baggage and Dormitory Building.
 - 2. View from west side of shelter.
 - 3. Looking north.
 - 4. Looking south.

- South tower.
- South tower from roof of Kitchen and Laundry 6. Building. North tower.
- 7.

Plate

 Oil tank, view southeast.
 Oil tank, aerial view.
 "Elimination of Fire Hazards", 1952
 Plan for new steel water tank, 1920. Exhibit





APPENDIX A

SELECTED BIBLIOGRAPHY

- 1. Reports, Books, and Articles
- Bolino, August C. <u>The Ellis Island Source Book.</u> Washington, D.C.: Kensington Historical Press, 1985.
- Building Conservation Technology/The Ehrenkrantz Group.
 "Historic Structures Report; Ellis Island Statue of
 Liberty National Monument New York." Prepared for the
 National Park Service, 1978.
- Building Conservation Technology/The Ehrenkrantz Group and Syska & Hennessy, Inc. "The Mechanical and Electrical Rehabilitation of the Main Building; Ellis Island," prepared for the National Park Service, 1978.
- Kelly, Bruce. "Historic Landscape Analysis of Ellis Island." Prepared for Beyer Blinder Belle/Anderson Notter Finegold. On file in the office of BBB/ANF in New York.
- Matero, Frank Gerard. "Exterior Conditions Study: Main Building; Ellis Island National Monument." Prepared for Beyer Blinder Belle/Anderson Notter Finegold, April 1984. On file in the office of BBB/ANF in New York.
- New York University Museum Studies Program. Flora S.
 Kaplan, Project Director. "Inventory of Historic Furnishings at Ellis Island." Prepared for the National Park Service, October 1982.
- Pitkin, Thomas M. <u>Keepers at the Gate; A History of Ellis</u>
 <u>Island</u>. New York: New York University Press, 1975.
- Robert Silman Associates, P.C. "Ellis Island; Historic Structures Report; Structural Systems" and Supplement. Prepared for Beyer Blinder Belle/Anderson Notter Finegold, November and December 1984. On file at the office of BBB/ANF in New York.
- Syska & Hennessy, Inc. "Ellis Island; Historic Survey Report; Mechanical Systems." Prepared for Beyer Blinder Belle/Anderson Notter Finegold, December 1984. On file in the office of BBB/ANF in New York.
- U.S. Department of the Interior, National Park Service.
 "Chronology of Immigration, Legislation, and the Ellis Island Immigration Station During 19th and 20th

- Centuries." Appendix C in "Ellis Island Study," prepared by the National Park Service for the Secretary of the Interior, May 1978.
- U. S. Department of the Interior, National Park Service,
 Denver Service Center. <u>General Management Plan: Statue</u>
 of Liberty National Monument. September 1982.
- _____. "Historic Resource Study (Historical Component),"
 by Harlan D. Unrau. May 1984.
- . "Historic Structure Report; Ellis Island; Historical Data," by Harlan D. Unrau. May 1981.
- U.S. Department of the Interior, National Park Service, Harper's Ferry Center. "Statue of Liberty Ellis Island National Monument, Interpretive Prospectus," January 1984.

2. Drawings and Documents

- Denver. National Park Service. Denver Service Center.

 Architectural Drawings of Buildings on Ellis Island, New York Harbor.
- Denver. National Park Service. Denver Service Center.
 Ellis Island Architectural and Maintenance Records,
 1898-1955.
- Suitland, Maryland. National Archives. Washington National Records Center. Record Group 121, Records of the Public Buildings Service.
- Washington, D.C. National Archives. Record Group 85.
 Records of the Bureau of Immigration and Naturalization, 1906-1932.

3. Photographs

New York. Bettman Archives Inc.

- New York. New York Public Library. Local History and Genealogy Division. William Williams Collection.
- New York. Statue of Liberty Ellis Island National Monument Collection.
- New York. United Press International.
- New York. Wide World Pictures.

- Washington, D.C. The Catholic University of America. Powderly Papers and Photographs.
- Washington, D.C. Library of Congress, Prints and Photographs Division.
- Washington, D.C. National Archives. Audiovisual Archives Division, Still Pictures Branch.
- Washington, D.C. U.S. Immigration & Naturalization Service.

APPENDIX B

U.S. IMMIGRATION STATION, INCINERATOR

Historic American Building Survey Documentation

Form 10-920 (June 1983)

UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE

ARCHITECTURAL DATA FORM

		·			
STATE	COUNTY TOWN OR		TOWN OR VI	VICINITY	
New York - New Jersey	New York - Hudson Ellis Is		land		
HISTORIC NAME OF STRUCTURE (INCLUDE SOURCE FOR NAME)				HABS NO.	
U.S. Immigration Station, Incinerator				NY-6086-B	
SECONDARY OR COMMON NAMES OF STRUCTURE					
N/A					
COMPLETE ADDRESS (DESCRIBE LOCATION FOR RURAL SITES)					
Ellis Island, New York Harbor, New York					
DATE OF CONSTRUCTION (INCLUDE SOURCE) (U.S. Department of the Interior, "Historic Structure Report", pp. 582-83)		ARCHITECT(S) (INCLUDE SOURCE) Unknown			
SIGNIFICANCE (ARCHITECTURAL AND HISTORICAL, INCLUDE ORIGINAL USE OF STRUCTURE)					
This building was the second incinerator on Ellis Island. Constructed in 1911 by the Morse-Boulger Destructor Company, it was used to burn all garbage on the island.					
STYLE (IF APPROPRIATE) N/A					
MATERIAL OF CONSTRUCTION (INCLUDE STRUCTURAL SYSTEMS) Exterior brick bearing walls sheathed in stucco; concrete slab ground floor at grade; reinforced wood-formed concrete roof slab on steel beams; steel smokestack; low concrete enclosure wall; structural iron framing on west side.					
SHAPE AND DIMENSIONS OF STRUCTU Rectangular; 28'-1/2" x 21' (bldg.);	54' x 29'-1/2" (s1	ab)			
EXTERIOR FEATURES OF NOTE The 1-story stucco incinerator rests on an extended concrete slab base. It has a cornice, six-light wood sash windows with iron grilles and a pair of metal doors on the south elevation. A steel smokestack is located at the northeast corner. Low concrete enclosure walls are located at the southeast corner and on the north side. Structural iron framing extends outward from the west side of the building. A baler sits under this framing (originally a roofed enclosure) at the southwest corner. A free-standing brick furnace is located west of the incinerator. See attached drawing.					
INTERIOR FEATURES OF NOTE (DESCRIBE FLOOR PLANS, IF NOT SKETCHED) The interior consists of a narrow passage between the two incinerators along the east and west walls and a small loading space along the south end of the incinerators. An iron ladder at the south end provides access to the cast iron charging platform and the tops of the incinerators. One circular hole in the ceiling over each incinerator marks the location of flues. See attached floor plans.					
MAJOR ALTERATIONS AND ADDITIONS WITH DATES					
1. 1934: Installation of a self-supporting steel smokestack at the northeast corner.					
-2. 1937: A metal extension of structural iron framing covered by a corrugated copper roof was added to the western side of the building as housing for a power-driven scrap metal baler.					
PRESENT CONDITION AND USE The exconcrete enclosure wall is destroyed all metal elements are corroded. The and loss of material. The building i	on the south and wo brick furnace is	est sides, while the in poor condition an	northern wall	is still partially intact.	
OTHER INFORMATION AS APPROPRIAT Due to deterioration and interference	E.		s the incinera	tor will be demolished.	
SOURCES OF INFORMATION (INCLUDING LISTING ON NATIONAL REGISTER, STATE REGISTERS, ETC.)					
See attached bibliography					
COMPILER, AFFILIATION				DATE	
Beyer Blinder Belle, Architects & Pla	nners			7 February 1985	

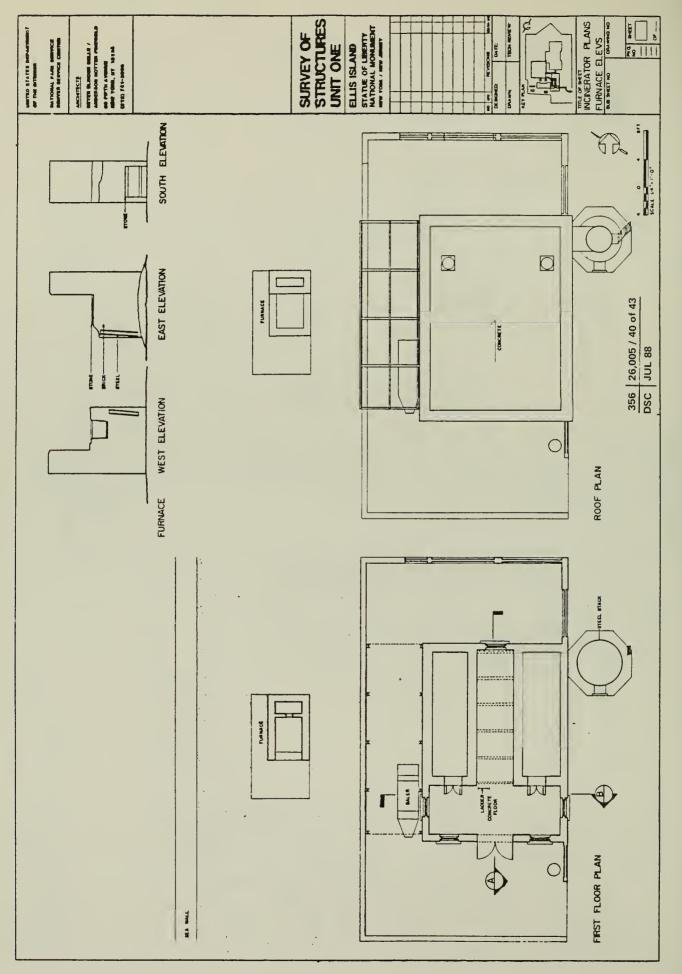
US IMMIGRATION STATION, INCINERATOR HABS No. NY-6086-B Page 2

BIBLIOGRAPHY

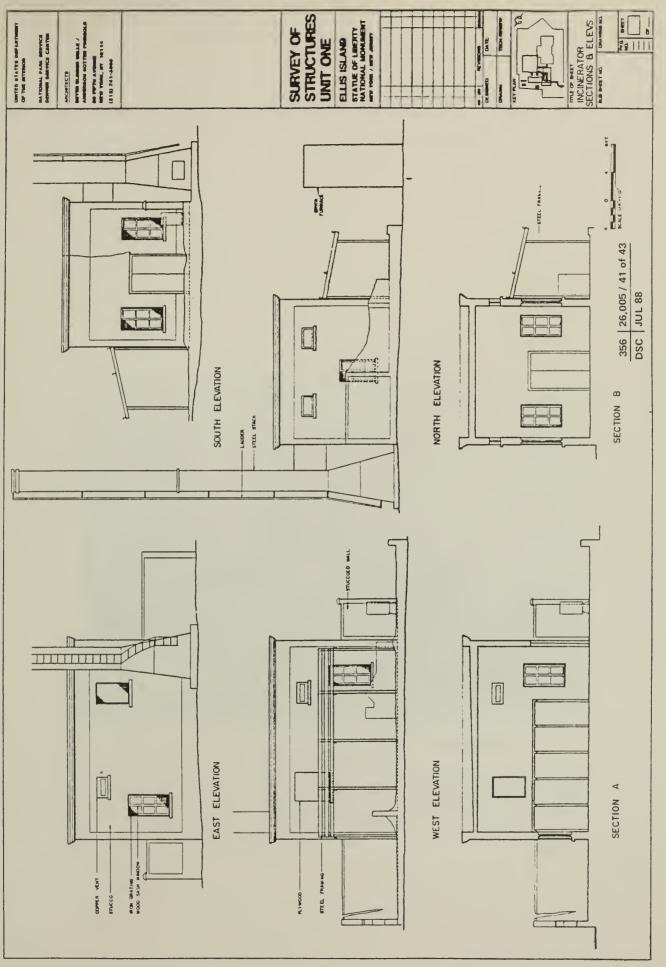
- Ellis Island is part of the Statue of Liberty National Monument.
- Beyer Blinder Belle, "Historic Structures Report; Unit One; Ellis Island Statue of Liberty National Monument". Preliminary Draft. Prepared for the National Park Service, 1985.
- Building Conservation Technology/The Ehrenkrantz Group.
 "Historic Structures Report; Ellis Island Statue of Liberty National Monument New York." Prepared for the National Park Service. 1978.
- U.S. Department of the Interior, National Park Service, Denver Service Center. "Historic Structure Report; Ellis Island; Historical Data," by Harlan D. Unrau May, 1981.

Architectural Drawings of Buildings on Ellis Island, New York Harbor. Department of the Interior, National Park Service, Denver Service Center.

UNITED STATES DEPARTMENT OF THE INTERIOR / NATIONAL PARK SERVICE

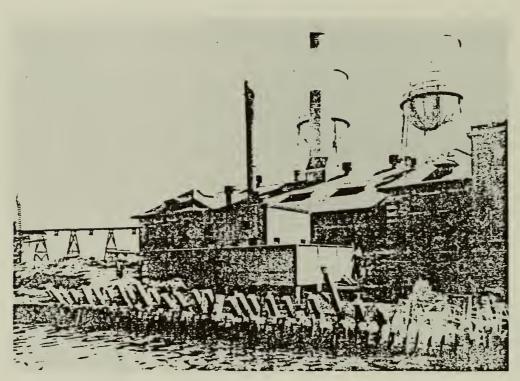


US IMMIGRATION STATION, INCINERATOR HABS No. NY-6086-B
Page 4



US IMMIGRATION STATION, INCINERATOR HABS No. NY-6086-B Page 5

US IMMIGRATION STATION, INCINERATOR HABS No. NY-6086-B
Page 6



SEAWALL, BAKERY AND CARPENTER SHOP, POWERHOUSE, AND INCINERATOR, 1934

Photograph taken on September 24, 1934, showing construction in progress on the new granite-faced seawall (section 3) for the fill behind island 1 as well as the bakery and carpenter shop, powerhouse, and incinerator buildings

National Archives, Audiovisual Archives Division, Still Picture Branch

APPENDIX C

U.S. IMMIGRATION STATION, GREENHOUSE

Historic American Building Survey Documentation

UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE

ARCHITECTURAL DATA FORM

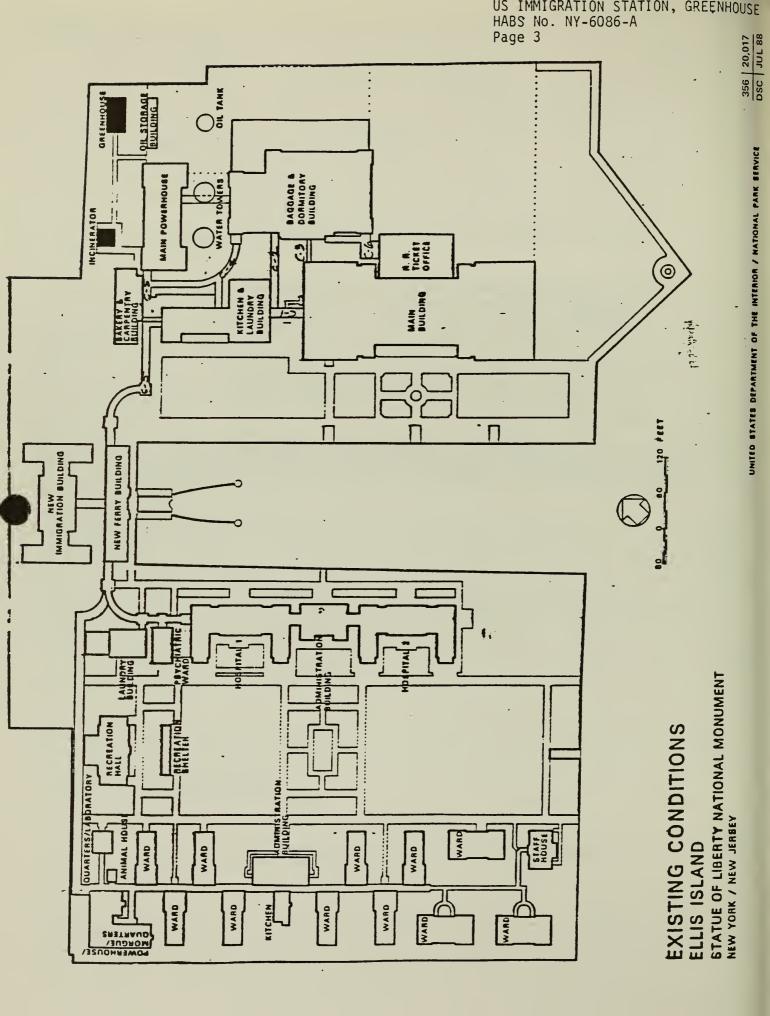
STATE	Mary Vends - Under		TOWN OR VIC				
New York - New Jersey			Ellis Islam				
HISTORIC NAME OF STRUCTURE (INCL	HABS NO.						
U.S. Immigration Station, Greenhouse	NY-6086-A						
SECONDARY OR COMMON NAMES OF STRUCTURE N/A							
COMPLETE ADDRESS (DESCRIBE LOCATION FOR RURAL SITES)							
Ellis Island, New York Harbor, New York							
DATE OF CONSTRUCTION (INCLUDE SOURCE) (U.S. Department of the Interior, 1935 "Historic Structure Report", pp. 590-592) ARCHITECT(S) (INCLUDE SOURCE) Lord & Burnham Co., Greenhouse Designers & Manufa (National Park Service, Dwg. No. 462/41,931)							
SIGNIFICANCE (ARCHITECTURAL AND HISTORICAL, INCLUDE ORIGINAL USE OF STRUCTURE) The greenhouse was built by the B & Z Contracting Co. It replaced a deteriorating greenhouse located north of the Main Building. The greenhouse was constructed for the purpose of propagating all the flowering plants on the Island.							
STYLE (IF APPROPRIATE) N/A							
MATERIAL OF CONSTRUCTION (INCLUDE STRUCTURAL SYSTEMS) Standard greenhouse structure: angle iron frame, trusses, and pipe columns. Five steel trusses and two longitudinal angle braces support the wood framing for glazing of the gable roof. Other features include a four foot concrete base wall and copper capping on the plain wood ridge.							
SHAPE AND DIMENSIONS OF STRUCTURE (SKETCHED FLOOR PLANS ON SEPARATE PAGES ARE ACCEPTABLE)							
Rectangular; 51' x 25'-2". Measured floor plans attached.							
EXTERIOR FEATURES OF NOTE The north and south ends are fifteen lights wide and the east and west sides consist of six wood-framed awning windows of six lights each. The wood door on the south end has nine intact upper lights and three wood panels. In front of the entry door is a small square vestibule, with a three foot high concrete wall above a red quarry tile floor. All framing above the wall has been destroyed and the weathered door to this vestibule leans against one side. See attached drawings.							
INTERIOR FEATURES OF NOTE (DESCRIBE FLOOR PLANS, IF NOT SKETCHED) The flooring is concrete. Tables consisting of wood frames, pipe legs and metal corners line the perimeter with two long tables down the center. A narrow room at the north end is formed by a glass wall and doorway. A table is intact along the north, and on the south wall is another short table and a basin sink. See attached floor plans.							
MAJOR ALTERATIONS AND ADDITIONS WITH DATES							
None							
PRESENT CONDITION AND USE All metal elements display surface corrosion and all wood framing is weathered and split. Pipe columns are rusted out at the bases. At the northern end, almost all wood framing is missing. The majority of glazing is missing or broken. There is some cracking of the foundation wall at the entry. The building is vacant and is slated for demolition.							
OTHER INFORMATION AS APPROPRIATE Due to deterioration and interference with plans for permanent site utilities the greenhouse will be demolished.							
SOURCES OF INFORMATION (INCLUDING LISTING ON NATIONAL REGISTER, STATE REGISTERS, ETC.)							
See attached bibliography.							
COMPILER, AFFILIATION				DATE			
Beyer Blinder Belle, Architects & Plann	ners			7 February 1985			

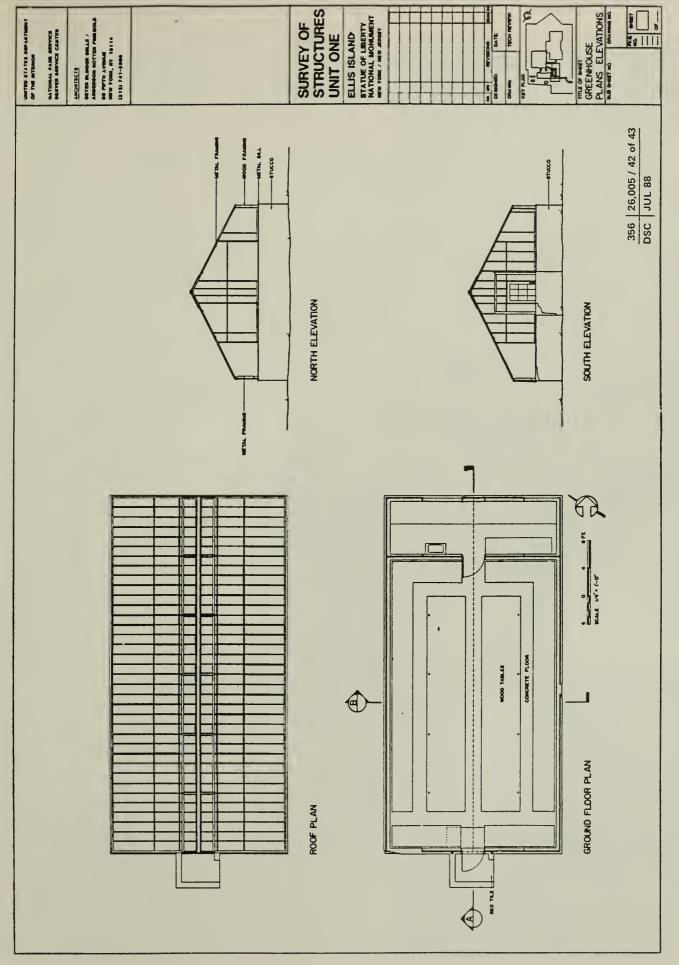
US IMMIGRATION STATION, GREENHOUSE HABS No. NY-6086-A Page 2

BIBL TOGRAPHY

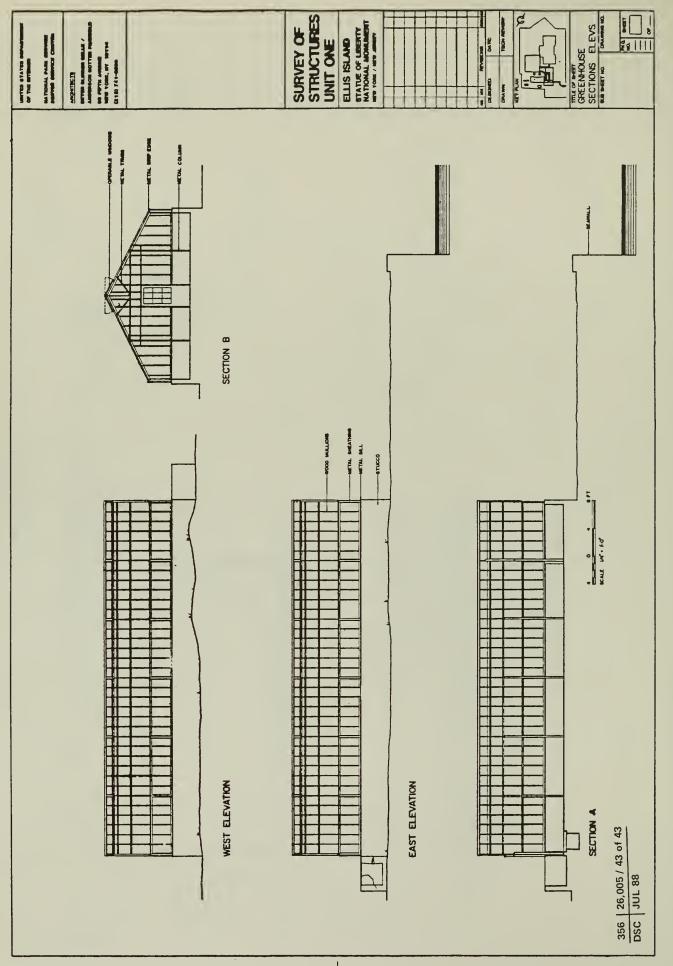
- Ellis Island is part of the Statue of Liberty National Monument.
- Beyer Blinder Belle, "Historic Structures Report; Unit One; Ellis Island Statue of Liberty National Monument". Preliminary Draft. Prepared for the National Park Service, 1985.
- Building Conservation Technology/The Ehrenkrantz Group.
 "Historic Structures Report; Ellis Island Statue of Liberty National Monument New York." Prepared for the National Park Service. 1978.
- U.S. Department of the Interior, National Park Service, Denver Service Center. "Historic Structure Report: Ellis Island; Historical Data," by Harlan D. Unrau May. 1981.

Architectural Drawings of Buildings on Ellis Island, New York Harbor. Department of the Interior, National Park Service, Denver Service Center.

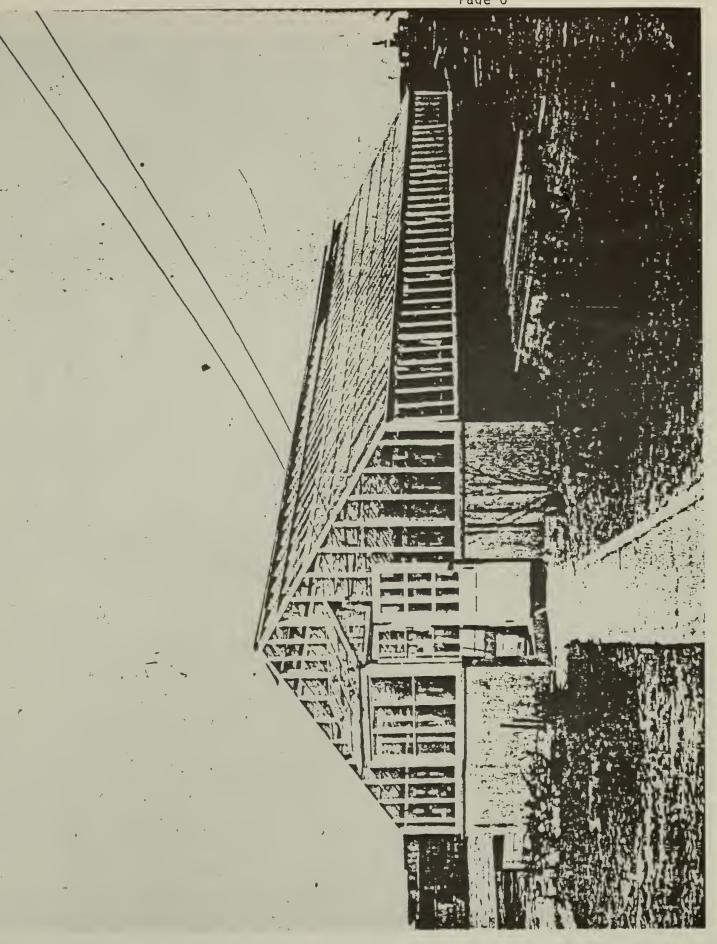




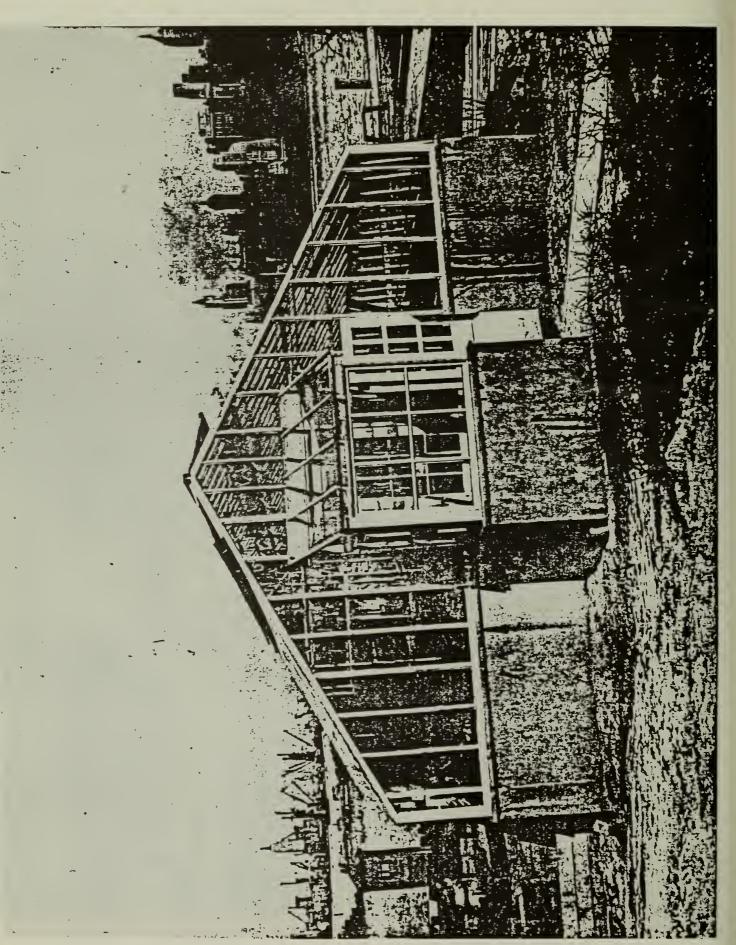
US IMMIGRATION STATION, GREENHOUSE HABS No. NY-6086-A Page 4



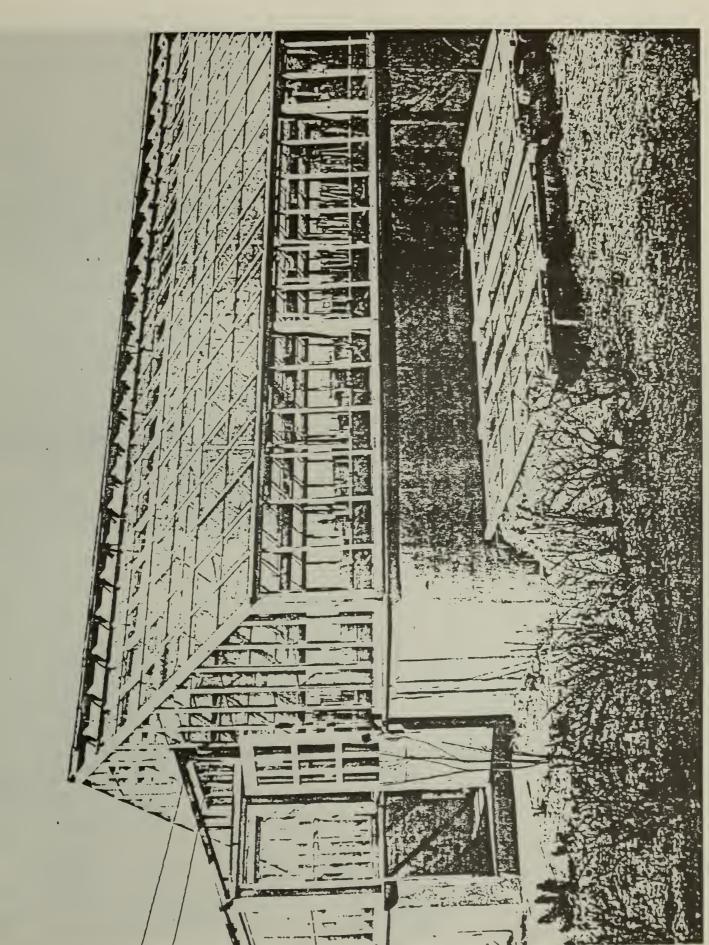
US IMMIGRATION STATION, GREENHOU HABS No. NY-6086-A
Page 6



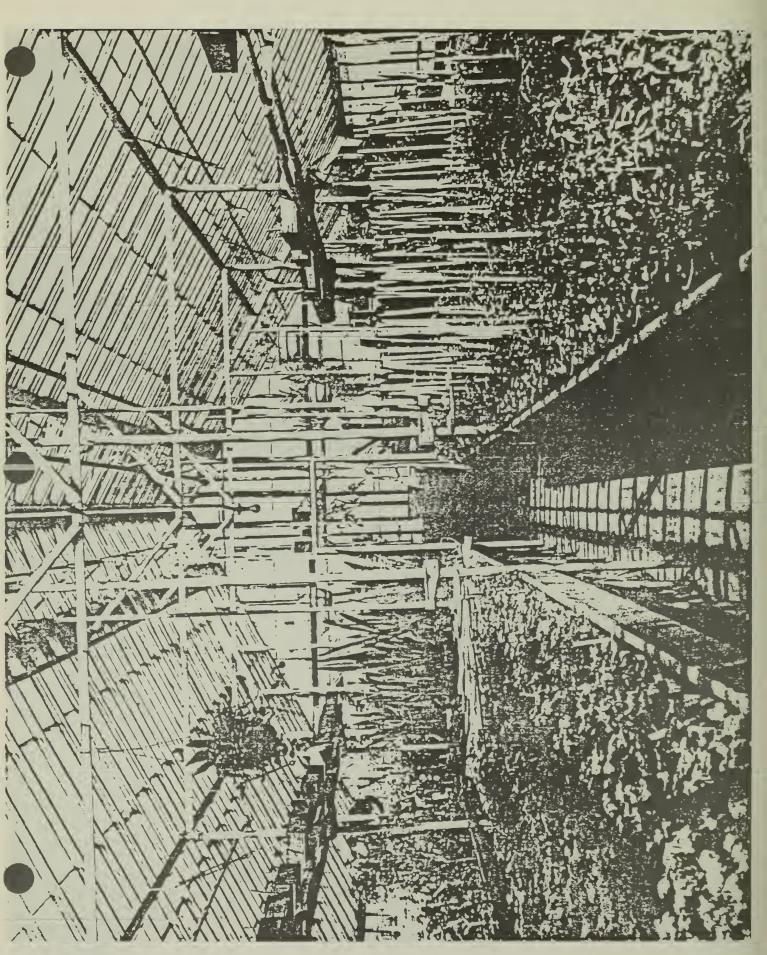
Greenhouse, view northwest, World War II, U.S. Immigration and Naturalization Service.



Greenhouse, view north, World War II, U.S. Immigration and Naturalization Service.



Greenhouse, view northwest, World War II, U.S. Immigration and Naturalization Service.



Greenhouse, interior, view north, World War II, U.S. Immigration and Naturalization Service.

BIBLIOGRAPHY ELLIS ISLAND HISTORIC STRUCTURE REPORT DOCUMENTATION

Prepared for the U.S. Department of Interior/National Park Service, Denver Service Center by Beyer Blinder Belle/Notter Finegold Alexander

HISTORIC STRUCTURES REPORTS

Volume 1	The Main Building June 1, 1984	NPS D-41				
Volume 2 Part One	Unit One Buildings December 1985	NPS D-42				
Volume 2 Part Two	Unit One Buildings December 1985	NPS D-42				
Volume 3	Powerhouse December 1985	NPS D-43				
Volume 4 Part One	Units 2, 3 and 4 August 30, 1986	NPS D-44				
Volume 4 Part Two	Units 2, 3 and 4 August 30, 1986	NPS D-44				
Volume 4 Part Three	Units 2, 3 and 4 August 30, 1986	NPS D-44				
EXISTING CONDITION SURVEYS						
Volume 1 Appendix A	Main Building February 1, 1984	NPS D-41				
	2					
Volume 2 Appendix D	Unit One Buildings July 1985	NPS D-42				
	Unit One Buildings	NPS D-42				
Appendix D Volume 3	Unit One Buildings July 1985 Powerhouse					

EIP: HSRList

As the nation's principal conservation agency, the Department of the Interior has basic responsibilities to protect and conserve our land and water, energy and minerals, fish and wildlife, parks and recreation areas, and to ensure the wise use of all these resources. The department also has major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

Publication services were provided by the graphics staff of the Denver Service Center. NPS D-42 July 1988

